Dec. 22, 1969

Main

FOREIGN AGRICULTURE

December 22, 1969

Canadian Agricultural Outlook

U.S. Farm Export Trade in the 1960's

Soybean Exports in 1970

Plants and Perfume—Lifeblood of a City

Foreign
Agricultural
Service
U.S. DEPARTMENT
OF AGRICULTURE

JAN 9 1970

UNIVERSITY LIBRARY

FOREIGN AGRICULTURE

VOL. VII • No. 51 • December 22, 1969

In this issue:

2 Summing Up the Sixties—Substantial Growth in U.S. Foreign Farm Trade By Joseph R. Corley

6 New Canadian Grain Transportation System Proposed

7 Assistant Secretary Palmby Cites Milo's Export Chances

8 Canadian Agricultural Outlook Conference

11 1970 Soybean Export Outlook Is Bright By Raymond A. Ioanes

13 Australian Wheat Production and Storage Problems

14 Switzerland Implements New Dairy Regulations

15 Plants and Perfume—Lifeblood of a City

18 Indonesian Farmers Harvest Less Pepper This Year

19 CCC Cattle Shipment to Thailand

20 Rice in India—Promising New Varieties Still Face Problems By Guy L. Haviland

22 Crops and Markets Shorts

24 British Tariff Redesigned By Donald M. Nelson, Jr.

This week's cover:

An aerial view of a Saskatchewan farm with its livestock and fields. For a report on the Canadian agricultural outlook for the 1970's see article beginning on page 8. (Photo courtesy of Canadian National Film Board.)

Clifford M. Hardin, Secretary of Agriculture
Clarence D. Palmby, Assistant Secretary for International Affairs and Commodity Programs
Raymond A. Ioanes, Administrator, Foreign Agricultural Service

Editorial Staff:

Editor: Alice Fray Nelson; Associate Editors: Janet F. Beal and Elma E. Van Horn; Assistant Editors: Faith N. Payne, Mary A. Rudbeck, Ann L. Barr, Margaret A. Weekes.

Advisory Board:

W. A. Minor, Chairman; Horace J. Davis, Anthony R. DeFelice, James A. Hutchins, Jr., Kenneth K. Krogh, Robert O. Link, Kenneth W. Olson, Donald M. Rubel, Dorothy R. Rush, Raymond E. Vickery, Quentin M. West.

Use of funds for printing *Foreign Agriculture* has been approved by the Director of the Bureau of the Budget (May 1, 1969). Yearly subscription rate, $10.00 domestic, $13.00 foreign; single copies 20 cents. Order from Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

Contents of this magazine may be reprinted freely. Use of commercial and trade names does not imply approval or constitute endorsement by USDA or Foreign Agricultural Service.

Summing Up the Sixties—

Substantial Growth in

By JOSEPH R. CORLEY
Foreign Development and Trade Division
Economic Research Service

From 1960 through 1969 total U.S. world trade in agricultural products expanded more than one-fourth—from $8.7 billion to an estimated $11 billion, as both exports and imports rose. Throughout the 10-year period farm exports outweighed farm imports, creating a favorable agricultural trade balance —a valuable plus in the U.S. balance of international payments.

This was the decade that saw the disappearance and reappearance of world surpluses of wheat and rice . . . the increasing emphasis on U.S. farm exports for dollars . . . the movement toward harder terms on concessional food shipments and a growing insistence on self-help by food aid recipient countries . . . the beginning of the Green Revolution in overpopulated, underdeveloped Asian nations.

It was the era of increased protectionism in agricultural trade for some of the major commercial customers of U.S. agriculture, particularly the European Community. And it was the period when Japan, the perennial No. 1 U.S. farm market, began to diversify its sources of supply—by stepping up agricultural purchases from numerous Asian and East African countries.

All of these happenings influenced the year-to-year record of U.S. farm trade. In general, they reflected a period of substantial growth in U.S. farm product exports during the 1960-66 period and downtrend during 1967-69. Overall, agricultural imports trended upward throughout the decade. They remained at a relatively stable level through 1965, then advanced rapidly from 1966 to 1968. In 1969 they may drop slightly.

General economic conditions in the United States and customer countries also played a part. In the United States, the year 1960 was ushered in amidst optimism—not only for the year but for the coming decade. An upturn in the first half of 1960 reversed the slight recession of 1959 and started a new economic growth period that continued through the sixties for the United States and much of the industrialized world. The economies of the United States and many industrial nations soared; the U.S. index of industrial production rose 47 points to 134 by 1968 (1963=100). A rising index for industrial production also indicated rapid growth for many West European countries. In East Asia, Japan's industrial production rose to 193 in 1968 compared with 69 in 1960. Taiwan's was up to 240 from 71.

Increasing exports and stable imports brought about a rise to 37 percent in agriculture's share of the U.S. balance of trade in 1965, compared with 19 percent in 1960. An abrupt jump in import value in 1966 of $404 million was overshadowed by the $652-million increase in agricultural exports.

th in U.S. Foreign Farm Trade

That year the agricultural trade balance reached a high of nearly $2.4 billion—more than half the total U.S. trade balance.

The export record

In 1960, U.S. exports of farm products established a new high, in both value and volume. At $4.8 billion, value was 22 percent above the previous year; during the 1955-59 period they had averaged less than $4 billion. A volume rise of 27 percent was indicated by the quantity index.

In 1961, U.S. farm exports reached $5 billion and in 1964, $6 billion. In 1966, they reached the alltime high of $6.9 billion, then edged downward during the next 3 years, closing the decade at an estimated $6 billion.

Dollar sales and food aid. Commercial sales accounted for most of the rise in agricultural exports during the decade. From a low of $3.4 billion in 1960 (including barter for overseas procurement), they rose to a high of $5.5 billion in 1966, then trended downward through 1969. Food aid shipments reached a decade high of $1.6 billion in 1964, the year India became the third largest outlet for U.S. farm products; farm exports to India that year were mainly foods shipped under government-financed programs to meet the unusually severe food deficit resulting from drought conditions.

After 1964 food aid shipments declined, falling to an estimated near-$1 billion in 1969. Leading recipients of government-financed exports during the decade were India, Pakistan, United Arab Republic, Republic of Korea, Brazil, South Vietnam, Yugoslavia, Poland, and Republic of China. Government-financed program exports have generally declined because of economic and agricultural development in many of the recipient countries.

Grains. Throughout the decade, grains and grain preparations made up the largest group of U.S. farm exports, accounting for 36 percent of the total in both 1960 and 1969. In 1966, when their value was $3.2 billion, their share of the total reached 46 percent.

Wheat and wheat flour exports fluctuated throughout the 10 years, reaching record levels in 1964 and 1966. Contributing most to the 1964 gain were increased dollar sales to Western Europe and the Soviet Union and government-financed shipments to developing countries. The Soviet Union purchased 65 million bushels of wheat in 1964 and other Communist Bloc countries about 40 million bushels.

A substantial part of the 1966 increase came from greater commercial sales to Western Europe and Japan; Japan took 82 million bushels—21 percent more than in 1965. Also, exports under special programs were up sharply to India, where drought reduced agricultural production; these sales were mainly for foreign currency.

In the 1967-69 period, exports of wheat and wheat flour fell sharply; in 1969 total value of these exports is expected

U.S. AGRICULTURAL EXPORTS: VALUE BY COMMODITY, CALENDAR YEARS 1960-69

Commodity	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969 [1]
	Mil. dol.	*Mil. dol.*	*Mil. dol.*	*Mil. dol.*	*Mil. dol.*	*Mil. dol.*	*Mil. dol.*	*Mil. dol.*	*Mil. dol.*	*Mil. dol.*
Animals and animal products:										
Dairy products	117	134	131	182	224	196	126	122	144	140
Fats, oils, and greases	176	181	147	172	249	226	291	179	151	166
Hides and skins	76	86	83	74	93	109	154	128	121	154
Meats and meat products	76	81	76	99	125	112	116	112	124	177
Poultry products	51	85	89	75	74	70	67	59	58	60
Other	80	67	64	75	75	75	72	75	79	85
Total animals and products	576	634	590	677	840	788	726	675	677	782
Cotton, excluding linters	980	874	528	577	682	486	432	463	460	296
Fruits and preparations	249	272	286	276	279	313	315	310	277	335
Grains and preparations:										
Feed grains, excluding products	518	518	788	794	856	1,134	1,334	1,054	926	906
Rice, milled	151	112	153	178	206	244	230	316	348	334
Wheat and flour	1,029	1,298	1,135	1,330	1,532	1,183	1,534	1,206	1,101	823
Other	54	59	71	71	62	71	88	99	85	90
Total grains and preparations	1,752	1,987	2,147	2,373	2,656	2,632	3,186	2,675	2,460	2,153
Oilseeds and products:										
Cottonseed and soybean oils	159	127	185	165	210	241	154	155	108	118
Soybeans	336	343	407	472	567	650	767	771	810	836
Protein meal	45	48	91	125	144	187	227	246	262	269
Other	54	48	42	54	80	79	81	73	90	89
Total oilseeds and products	594	566	725	816	1,001	1,157	1,229	1,245	1,270	1,312
Tobacco, unmanufactured	379	391	373	403	413	383	482	499	524	510
Vegetables and preparations	140	125	149	173	158	155	176	164	173	184
Other	162	175	236	289	318	316	335	347	388	410
Total exports	4,832	5,024	5,034	5,584	6,348	6,229	6,881	6,380	6,228	6,000

[1] November and December estimated.

to be a 10-year low. The substantial rise in wheat production throughout the world in 1968 and 1969 reduced world import demand for wheat and wheat products.

Exports of *feedgrains and feedgrain* products expanded sharply in the 1960-66 period. Their total value rose 2½ times—from $551 million in 1960 to nearly $1.4 billion in 1966. In 1967-69, the value of feedgrains dropped by an estimated one-third.

Record corn and sorghum exports in 1966 resulted from larger takings by major commercial markets. That year purchases by the European Community eased slightly from 1965, but Japan's purchases were up by 9 percent to 4.5 million tons. India's receipts of sorghum grain (used as a food supplement during the drought years) rose sharply and boosted sorghum grain to a record level.

The 1969 level of feedgrain exports—estimated slightly below the 1968 level of $926 million (excluding products)—would be the lowest since 1964. Large world supplies of wheat and feedgrains reduced the overall requirements for U.S. feedgrains in the major world markets, and U.S. exports of oats, barley, and sorghum grain dropped sharply. Although the quantity of U.S. corn exports increased substantially in 1968 and 1969, value rose only slightly. The average annual export price of corn, which fell from $1.38 per bushel in 1967 to $1.25 in 1968, was up somewhat in 1969.

Rice exports soared during the decade; their estimated value in 1969 was more than twice that in 1960. Rice exports rose every year of the decade except 1961, 1966, and 1969, when they declined. Although the 1968 gains reflected both larger commercial shipments and food aid shipments, much of the rise was due to higher prices. Throughout the 10 years, South Vietnam and Indonesia were large markets for food aid shipments and the Republic of Korea, the United Kingdom, Canada, and several African countries for commercial shipments.

In the later 1960's large rice crops in the Philippines and Japan reduced demand for U.S. rice. Japan's substantial increase in rice production was prompted by its support programs that maintained a high domestic price.

Oilseeds. Exports of oilseeds and products—90 percent of them on a commercial basis—more than doubled in value during 1960-69, rising from $600 million in 1960 to $1.3 billion in 1968 and 1969. Most of the increase was accounted for by soybeans. The U.S. share of world soybean exports was consistently above 90 percent during these years.

Sales of oilcake and meal totaled an estimated $269 million in 1969, nearly a sixfold increase over 1960. The demand for high protein feed ingredients in Western Europe and Japan boosted the sales of both soybeans and soybean meal.

Vegetable oil exports, notably soybean oil, were more erratic during the sixties. Soybean oil averaged around 62 percent of the total export value of vegetable oils, fats, and waxes during this period. Through the 1960-65 period vegetable oil exports rose and fell; a high of $282 million was reached in 1965, then shipments declined steadily.

Animals and products. During the decade, shipments of animal products fluctuated, but the trend was upward. The value of animal products exported rose from $576 million in 1960 to a high of $840 million in 1964 and is estimated to finish 1969 at about $780 million. This represents a growth rate slightly better than 3 percent. Exports of live animals rose almost steadily but accounted for only about 5 percent of the export value of animals and animal products during the decade. Other animal products maintained larger shares. Hides and skins, which were 13 percent of animal and animal product export value in 1960, increased to about a fifth in 1969. The export value of meats and meat products increased similarly. Dairy product exports, valued at $117 million in 1960, reached a high of $224 million in 1964, before declining to an estimated $140 million in 1969.

Tobacco. The 599 million pounds of tobacco exported in 1968 made up the largest quantity exported during the 1960's. Value of tobacco exports remained fairly stable from 1960 through 1964, then rose to a higher level for the remainder of the decade. Value continued to increase through 1968 and 1969. In 1965, United Nations sanctions against Rhodesia—a major competitor of the United States—aided U.S. tobacco exports in 1966 and later years.

Fruits and vegetables. Exports of *fruits and preparations* rose from $249 million in 1960 to an estimated $335 million in 1969, high for the 10-year period. Fresh fruit exports contributed most of the increase during the decade; they rose in value from $104 million in 1960 to an estimated $160 million in 1969, after falling to $133 million in 1968.

Exports of dried fruits rose moderately during the period, accompanied by the slightly rising exports of canned fruits.

The estimated value of exports of *vegetables and preparations* in 1969 was slightly more than half the value of fruit and fruit preparation exports. The average annual increase in the export value of vegetables and preparations was about 3 percent, mostly for fresh vegetables.

Cotton. In 1960, the value of cotton exports doubled the value of such exports in 1959. But from 1961 on, cotton exports declined in value almost continuously, with 1969's estimated value falling to a low for the decade. Factors that influenced this reduction: Synthetic fibers came into greater use; foreign cotton production increased as U.S. cotton production was curbed; prices of most foreign-grown cotton were generally lower than U.S. prices.

In Western Europe, cotton's share of total textile use fell, while consumption of manmade fibers increased. In other industrial countries, such as Japan, expanded use of manmade fibers has not been as great as in Western Europe, but it is increasing.

U.S. cotton production in 1960-64 averaged 14.9 million bales, fell to 11.0 million in 1968, and is estimated at 10 million for 1969. For the same periods, foreign Free World production rose from a 21.1-million-bale average for 1960-64 to 26 million bales in 1968, then declined slightly to an estimated 25.7 million in 1969.

The import record

In the first half of the decade, the range in imports was from a low of $3.7 billion in 1961 to a high of $4.1 billion in 1965; during 1963-65, however, the range was less than $100 million. During 1965-68, agricultural imports rose $1 billion, the sharpest short-run rise since the increase in imports immediately preceding the Korean War.

In general, the United States is a liberal importer of agricultural products. It imposes no duty or only a minimum duty on imports that do not compete with its own farm output. Even for competitive products, duties are kept relatively low and few nontariff measures are used.

Most U.S. supplementary imports—that is, imports either

directly or partially competitive with U.S. farm production—trended upward during the decade, rising from a low of $1.9 billion in 1960 to an estimated $3 billion in 1969. Animal products accounted for much of the increase; imports of these products may reach $1.3 billion in 1969 compared with $664 million in 1960. Imports of meat and meat products—notably beef and veal—more than doubled, boosted by heavy demand for good and commercial grades of meat. The stepped-up use of beef in a wide range of prepared foods attracted imports, especially from Australia and Central America.

Sugar imports reached a high of $641 million in 1968 and may do equally well in 1969, up from $507 million in 1960. Sugar imports, which are regulated by quotas granted to the various supplying countries, have increased to meet rising demand during the last decade.

Imports of *fruits, nuts, and vegetables* rose sharply during the 10 years, probably exceeding $500 million in 1969, up from $237 million in 1960. The termination in 1964 of the law (P.L. 82-78) admitting seasonal agricultural workers from Mexico may have been directly related to the rise in certain fruit and vegetable imports. For instance, domestic production of strawberries declined and U.S. imports of frozen strawberries increased. Rising minimum wages for farm workers have further increased domestic costs of producing fruit and vegetable products. These cost disparities between domestic production and import prices have encouraged larger imports of products such as tomatoes, mushrooms, and pineapples. The rising demand for year-round supplies of commodities produced only seasonally in the United States has also been effective in expanding imports, as well as the demand for more varied and exotic goods. Imports of fresh bananas rose from $79 million in 1960 to an estimated $180 million in 1969.

Green coffee import volume reached a post-World War II high of over 3.4 million pounds in 1968. Value of 1968 imports was nearly $1.14 billion compared with $963 million the year before. The previous high for coffee imports had been 1964 when the total value reached nearly $1.2 billion.

Crude rubber was a relatively important import for the United States in the early part of the decade. In 1960 it ranked fourth among total complementary imports. These imports have trended downward since then, reaching a decade low of $170 million in 1967. In 1968, rubber purchases recovered somewhat by rising to $188 million, and in 1969 they are expected to exceed $250 million, mainly because of higher prices. Increased use of synthetics in rubber product manufacture contributed to the lower demand for crude natural rubber.

Cocoa bean imports were sharply lower in volume during 1968 and 1969 than in any year since 1959. Volume slipped to an estimated 470 million pounds in 1969, from 511 million pounds in 1968 and 633 million pounds in 1967. Value did not decline in as great a percentage because of higher prices. The decline in imports during the latter part of the decade and the rising prices reflected lower African production.

Export destinations and import sources

Where the exports went. During the decade, U.S. agricultural products were shipped to more than 150 countries, but 10 countries accounted for an average of 60 percent of the total exported.

U.S. AGRICULTURAL TRADE: VALUE BY PRINCIPAL EXPORT DESTINATIONS AND IMPORT SOURCES, 1960 AND 1968

Kind of trade and country	1960	1968
	Million dollars	*Million dollars*
Exports to—		
Japan	485.4	932.7
Canada	432.3	595.2
Netherlands	319.7	467.5
West Germany	354.9	397.1
United Kingdom	509.8	374.0
India	425.2	363.5
Italy	159.1	230.9
Republic of Korea	71.5	190.4
South Vietnam	22.0	152.3
Spain	113.1	146.6
Other	1,931.2	2,377.8
Total	4,824.2	6,228.0
Imports from—		
Brazil	495.5	564.1
Mexico	223.0	398.8
Philippines	240.8	315.6
Australia	91.3	301.7
Canada	167.5	226.2
Colombia	245.2	178.2
New Zealand	113.0	167.2
Dominican Republic	96.3	139.2
Argentina	84.5	127.6
Netherlands	82.3	124.1
Other	1,985.2	2,485.7
Total	3,824.6	5,028.4

Except for 1962, Japan ranked as the largest market. In that year Canada's receipts of U.S. farm products were the highest. In all other years except 1961, Canada ranked as the second largest market; that year the United Kingdom was second.

During the 10 years *Japan* was a large market for U.S. wheat, feedgrains, cotton, oilseeds, animal fats and oils, and hides and skins. From 1964 on, it was the largest market for U.S. feedgrains; its share was 26 percent in 1968 compared with 16 percent in 1964. Corn was the principal feedgrain exported to Japan. Japan was also the largest market for U.S. soybeans. Its soybean purchases from the United States in 1968 totaled $218 million, more than one-fourth of U.S. soybean exports.

During the earlier years of the decade Japan received some U.S. assistance in the form of food aid shipments. But by 1965 it had become, for the most part, a commercial customer for U.S. farm products.

In contrast, U.S. farm imports from Japan were relatively small. Japan ranked 36th as a supplier of U.S. farm imports in 1968. More than half these imports from Japan were fruits and vegetables.

U.S. exports to *Canada* increased an average of 4 percent a year during the sixties. Wheat, feedgrains, and oilseeds accounted for nearly one-third of these exports; most of the grain and oilseed shipments were destined to downriver storage elevators on the St. Lawrence for transshipment overseas. Canada was the largest market for U.S. fruits, nuts, and vegetables. Its purchases totaled $215 million in 1968, 44 percent of total U.S. exports of these products.

U.S. farm exports to the *Netherlands*, like those to Canada, are overstated because they include commodities transshipped to other European countries. Rotterdam is a break-bulk des-

tination for shipments of grain and oilseeds. For this reason, the exports to the Netherlands include shipments to West Germany, France, Switzerland, United Kingdom, and other North European countries. In 1968, total shipments of U.S. farm products to the Netherlands were $468 million, $154 million of which was estimated to have been transshipped. Compared with the approximately 33 percent transshipped in 1968, only 19 percent of U.S. farm exports to the Netherlands in 1960 went on to other destinations.

Other major markets for U.S. agricultural exports during the sixties included West Germany, the United Kingdom, India, Italy, Republic of Korea, South Vietnam, and Spain. These countries were important users of U.S. wheat and flour, feedgrains, tobacco, rice, cotton, and oilseeds. The United Kingdom and West Germany were the major markets for U.S. tobacco exports. India was the major taker of U.S. wheat, although most of such exports went as food aid shipments.

Tobacco shipments to the United Kingdom and West Germany expanded markedly in 1966 and continued at a relatively high level through 1969. This increased level of exports corresponded to the enforcement of the United Nations sanctions against Rhodesia.

The Republic of Korea and South Vietnam took increasingly more U.S. farm products during the decade. Shipments to South Vietnam were valued at $22 million in 1960 and $169 million in 1967. During the earlier years of the 1960's practically all these exports went as food aid. By 1965, commercial shipments became evident, reaching $3 million—4 percent of the total. In 1966 they amounted to $21 million or 15 percent of the total. From 1967 through 1969, U.S. food aid shipments to South Vietnam increased while commercial shipments decreased.

U.S. farm exports to the Republic of Korea reached $190 million in 1968, nearly three times greater than in 1960. Commercial exports to Korea increased almost yearly during the decade, reaching $91 million in 1968, 48 percent of total U.S. exports to that country. Like Japan and Spain, Korea received considerable aid from the United States in the years immediately following World War II, but, as internal development occurred, South Koreans have become more self-sufficient. They may eventually develop into a major commercial customer. Government-financed exports to the Republic of Korea declined from 84 percent of total agricultural shipments in 1960 to just over half of such shipments by 1968.

Where imports came from. Of the 150 countries that supply the United States with agricultural products, 10 leading suppliers accounted for about half the total imports during the sixties.

Brazil was consistently a major source of such tropical products as coffee, cocoa beans, and cane sugar.

Mexico, the Philippines, Colombia, and the Dominican Republic supplied the United States with much of its coffee, sugar, tropical oilbearing materials and oils, and tropical fruits and vegetables. Costa Rica, Ecuador, Honduras, and Panama supplied over 90 percent of U.S. banana imports during the decade.

U.S. imports of meats from Australia and New Zealand reached peak levels during the later years of the 1960's. In 1967 and 1968, Australia and New Zealand accounted for more than two-thirds of all fresh, chilled, or frozen beef and veal imported by the United States. Much of the meat imports was fresh, chilled, or frozen boneless beef primarily competitive with cow beef and other low-grade meats used for manufactured meat products.

Agricultural imports from Canada—fifth largest U.S. farm product supplier during the decade—totaled $226 million in 1968. Half of these imports consisted of dutiable cattle and meat and of fruits and vegetables.

New Canadian Grain Transportation System Proposed

Otto E. Lang, Minister Responsible for the Canadian Wheat Board, in a December 1 address to the annual meeting of the Alberta Wheat Pool, proposed a less costly and more efficient transportation and storage system for grain. He also warned that farmers may have to reduce wheat acreage, but stressed that the sales effort of the Canadian Wheat Board has maintained Canada's share of the world market in the face of stiff international competition.

Mr. Lang said the block system of transportation will be extended to all delivery areas by the opening of navigation next spring. This system, tested this year, is expected to permit a substantial saving in railway equipment required to move a given amount of grain. It is said to be a more reliable means of programing the movement of grain from the country to terminal elevators.

It is the government's responsibility to insure that western farmers are accurately informed of the sales prospects before the critical time for decisions on spring planting so that the sales opportunity can be met with the lowest possible expense. As Mr. Lang said, "In many cases it may be that a clear understanding of the market opportunities for the coming year would lead farmers to the conclusion that they should not invest their revenues from sales in further production."

He suggested that farmers might "reduce their inventory by the amount of sales and thus put themselves in a more liquid position, with more of their revenues remaining free to provide a reasonable living income for the year."

According to Mr. Lang's office, a means of reducing storage and handling costs that requires urgent attention is the reduction of the number of country elevators from the existing 5,000 at some 2,000 delivery points across the prairie. "The grain industry is dependent on a total transportation and storage and handling system that has the capacity to meet very large exports in some years without being unreasonably expensive to carry during years of lower export sales.

Canada's share of the world wheat market has held up amazingly well in spite of a decrease in the total world trade of wheat, according to Mr. Lang. He said that Canada's exports dropped about 10 percent from the 1967-68 crop year to the 1968-69 crop year. At the same time, the United States dropped nearly one-third, while Australia showed a decline of some 25 percent, according to Mr. Lang's remarks.

Mr. Lang reiterated support for the Canadian Wheat Board. In addition he promised that the Board will not be called on to administer or be heavily involved in any agricultural program that does not materially assist in performing its selling function.

—Dispatch from ALFRED R. PERSI
Assistant U.S. Agricultural Attaché, Ottawa

In Texas speech

Assistant Secretary Palmby Cites Milo's Export Chances

In the late 1950's when the Department of Agriculture and the Grain Sorghum Producers and later the Feed Grains Council began their joint export development efforts for milo, livestock people in Europe and Japan didn't even know what it looked like. At the first trade shows where milo was exhibited, it was more of a curiosity than anything else.

From that small beginning of 22 million bushels in 1956-57, we expanded sorghum exports first to 100 million bushels in 1958-59, then to a level of 266 million bushels in 1965-66—more milo than the whole State of Texas was producing as recently as 10 years ago.

Milo was introduced to world markets in the late 1950's at prices subsidized by the Commodity Credit Corporation, and at levels well below the price of corn. As the feeding value of milo became common knowledge and more fully understood by overseas users, the price differential between corn and milo narrowed. This is the way it should be.

Three-year export decline

Then, something happened following 1965-66. Exports of milo from the United States have declined each year since 1965-66—from 266 million bushels to an estimate of only 90 million bushels this year. An export of 90 million bushels is below the level established 11 years ago in 1958.

Corn exports in 1958 were 230 million bushels. Sorghum that year supplied 30.3 percent of the combined exports of corn plus sorghum.

This year, with corn exports expected to reach 600 million bushels, it is now estimated that sorghum will supply, at the 90-million-bushel level, only 13 percent of the corn-sorghum exports.

The changing situation in Europe accounts for the near loss of milo exports to that area of the world. Continuation of the 10-percent levy on milo imports into the United Kingdom excludes us from that market. The EC variable grain import levy system and the differential so established between the grains cripples our ability to export to the European Community.

Because of the problems inherent in exporting milo to Europe, it is all the more important to understand the requirements of dependable customers such as Japan and Israel.

Still more basic, however, is the necessity to constantly remind ourselves that every dollar paid to milo producers by overseas customers adds to gross income. Milo sold to the Commodity Credit Corporation does not because CCC cannot utilize the grain—it must eventually be sold to someone who does use it.

At the moment, the export outlook is bright for milo—as well as for corn and soybeans.

Soybean producers, perhaps above any other major commodity group in this country, have appreciated the significance of exports, and have stood ready to service overseas customers. Corn producers also have consistently proved their interest in export markets.

Extract from remarks by Assistant Secretary of Agriculture Clarence D. Palmby at the 31st Annual Meeting of the Producers Grain Corporation, Amarillo, Texas, Dec. 1, 1969.

Milo producers have a big investment in past market development work. They have expended a great amount of time and money in developing exports—just as they have in developing domestic utilization. They have much to lose if they let their exports lag; they have much to gain by taking advantage of the investment they have already put ino the building of overseas markets.

The export opportunity

The opportunity is there. Japan and Israel would like to buy, this marketing year, at least 125 million bushels of milo from the United States. Will we supply them?

As total U.S. exports of corn and milo this marketing year hover around 700 million bushels, how much of that market will milo producers supply? The answer is that the share of the export market that goes to milo will depend on the market price of milo in relation to corn and to competing feed supplies around the world. It is that simple.

The Japanese like to include milo in their mixed feeds, particularly in poultry rations. This is a market well worth protecting and developing when you consider how rapidly the use of grain for feed is expanding in Japan. We estimate that the utilization of grain for feed in that country should increase by from 25 million to 30 million bushels a year! But if U.S. milo is going to share fully in that growth, the price relation between milo and corn must be reasonable and stable throughout the year. Stocks must be available every day of the year.

The State of Israel is also extremely promising as an importer of milo—a growing market that we should be alert to serve. The Israelis have developed superior processing methods that enhance the acceptability of milo as a feed in that country. But here again, we have to be ready to compete in terms of price and availability.

Both Japan and Israel are dynamic countries with expanding economies. Both are countries with tremendous potentials for upgraded living standards and improved diets. Both are expanding their consumption of livestock and poultry products.

We have the opportunity to capture, on behalf of U.S. milo, a growing share of these expanding markets for imported feeds in Japan, Israel, and other countries as well. But the opportunity is now. And the opportunity lies in stable prices and dependable supplies. Without stable prices and supplies, U.S. milo producers are likely to lose out in the race for some major grain markets—and this loss may never be regained.

New publication.—FAS will release a publication early next year entitled *U.S. Import Duties on Agricultural Products, 1968*. This publication will present changes in U.S. import duties on agricultural products since 1930 and will also indicate the final stages of Kennedy Round concessions. It is numbered Agriculture Handbook 368 and replaces a similar publication, Agriculture Handbook 143, published in 1959. Please address inquires on this publication to Information Service Branch, FAS, USDA, Washington, D.C. 20250.

Canadian Agricultural Outlook Conference

Over 200 conferees from across Canada gathered in Ottawa November 24-25 to hear a gloomy 1970 outlook for Canadian agriculture, particularly for wheat, tempered somewhat by a few bright spots discussed in the livestock and tobacco sectors. Representatives from federal and provincial agricultural departments and agricultural organizations were told that preliminary estimates indicated 1969 total farm production was up 3.5 percent over 1968, but realized net income—Can$1.4 billion—was 10 percent below 1968 and roughly equal to the average for 1962-66.

In announcing the 1969 Outlook Conference, Minister of Agriculture H. A. (Bud) Olson stated that this conference would pay more attention to implications of projections. Speaking to participants at the end of the meeting, Minister Olson emphasized that the major objective had been to provide producers with the information needed to make sound management decisions.

Agricultural structure

Most of the speakers, before projecting for 1970, analyzed the 1969 situation, specifically the growth in output but drop in farm income. While this situation was not entirely unanticipated by conference participants, the magnitude of the income decline was rather startling. Significant in the decline were total farm returns from field crops in 1969, estimated as 12.8 percent below 1968, and from marketings of wheat, forecast at 20 percent below the previous year. Such a decline represents a heavy blow to the wheat-oriented economies of the Prairie Provinces. On the brighter side, total cash returns to producers from livestock and livestock products during 1969 were estimated at about 5.5 percent above the 1968 level.

Consistent with Minister Olson's call to discuss implications, several speakers commented on possible major structural adjustments in Canadian agriculture. One of the background papers indicated that a wheat acreage of 20 million acres (25 million seeded last year) should be adequate considering current stock and export prospects over the next 2 years. Other comments speculated on diverting acreage to crops other than wheat, changing the current system of wheat marketing quotas, and reducing the number of farms.

Taking a look at the number of farms the country can support, one Outlook paper set the figure at 150,000 if farmers were to have a reasonable rate of return on their investment. The present rate of attrition would only reduce the current 430,000 farms to 315,000 farms by 1980. Viewing this projection, the paper concluded: "Canadian farmers and the entire agricultural community face a major problem of adjustment over the next decade."

Reviewing the situation and outlook for farm commodities in Canada, the Outlook papers summed up prospects for key commodities as follows:

Wheat

World import demands in 1969-70 are expected to remain at about the same level as last year, while Canadian wheat exports should be around 300 million bushels (including sales to Mainland China, but exclusive of any sales to the USSR for shipment during the crop year). Experience within the last 2 years of the declining export market and strong price competition indicates that a larger share of this market is unlikely to be obtained for the year as a whole through any further general lowering of export prices for wheat. In spite of the large wheat supplies and low prices for nonquota sales, it seems likely competition from low-priced oats and barley will limit the rise in the volume of wheat fed in Canada. Total use of wheat for domestic purposes and export will likely be about 450 million bushels.

With the record supplies available for the year, stocks of wheat on July 31, 1970, could rise by 230 million bushels to reach the exceptionally high level of over one billion bushels. Almost all this increase will be in farm stocks.

As a result of severe price competition in world markets and the large supplies of wheat in Canada, initial prices to producers were reduced by 20 cents to Can$1.50 per bushel basis No. 1 Northern in store at the Lakehead and Vancouver as of August 1, 1969. Prices for wheat sold for domestic consumption for food in Canada will be maintained at Can$1.95½ basis No. 1 Northern in store at the Lakehead, thus ensuring that producers will receive the IGA minimum price on this volume. Export prices at the beginning of the 1969-70 crop year were below the IGA minimum level, and they have declined further under continued pressure from large world wheat supplies. The problems of the realinement and stabilization of international prices for wheat are the subject of continuing consultations among exporters and within the framework of the International Grains Arrangement.

Consideration being taken of stocks on farms and in the elevators and the general export prospects over the next 2 years, an annual wheat production of approximately 400 million to 500 million bushels would be marketable from farms. This involves a further reduction in the area seeded to wheat in both 1970 and 1971. At average yields of 23 bushels per acre, 20 million acres would produce 460 million bushels. While Prairie wheat yields are susceptible to wide fluctuations, the higher proportion of summerfallow and the tendency to seed wheat on the better land will be significant factors tending to maintain high yields in the next few years.

Feedgrains

Canadian feedgrains production is forecast at 19.4 million tons, up from 18.0 million tons in 1960 (including nearly 2 million tons of mixed grains). A large increase in barley production and a small increase in oats more than offset a drop in corn production.

Forecast increases in livestock over the next 3 years indicate a steady rise in the numbers of grain-consuming animal units in Canada from 16.7 million in 1968-69 to about 18.7 million in 1971-72. Assuming continued high levels of concentrate feeding, it is estimated that feedgrain requirements will be 14.3 million tons for 1969-70, rising to 16.3 million tons by 1971-72. In addition, a small rise in wheat fed is assumed, from 2.1 million tons in 1968-69 to 2.2 million in 1971-72.

Exports of feedgrains by Canada have fallen in recent years, but with the decline in Canadian prices for barley and oats during 1968-69, which has continued into 1969-70, Canadian

Summarizing 1969 and looking into the 1970's, Canadian farm leaders see another year of higher production and lower income, reports Office of U.S. Agricultural Attaché, Ottawa, in reviewing the Conference.

feedgrains, especially barley, have become more competitive in overseas markets. Nevertheless, it is expected that stocks of feedgrains on July 31, 1970, will increase to a record high—about 11 million tons.

Flaxseed, Rapeseed

Canada, as well as other leading exporting countries, is expected to reach record flaxseed production levels this year, of between 85 million and 90 million bushels, compared with about 70 million bushels last year. Canadian flaxseed production in 1969 increased over 1968 by 12.6 million bushels. World imports have fallen from a total (flaxseed and linseed oil, flaxseed equivalent) of 52.1 million bushels in 1966 to 42.8 million in 1968.

The low stock level favored oil sales in the 1968-69 crop year. However, the record production of 1969-70 seems more than adequate to meet world demands; a similar crop in 1970-71 would create serious problems.

Future plans of the United States and Argentina are particularly important factors when considering a desirable acreage for Canada. Any Canadian production in excess of 25 million bushels would be difficult to market at a satisfactory price. An acreage reduction from 2.4 million acres to about 2 million is indicated for each of the next two years, unless producers are prepared to accept lower prices.

Canada sees Japan and Taiwan as the most promising outlets for its rapeseed in the next 2 years and for some time in the future, particularly if they use rapeseed meal in livestock and poultry feeds in substantial quantities.

In addition, Canada feels there are good prospects in 1969-70 for substantial sales to Western Europe, especially to the European Community and Britain, owing to low European production. Prices are likely to be comparable with those of last year, or a little higher, in spite of a large crop. Other favorable factors include increased consumption and a short supply of sunflower oil.

The domestic crush of rapeseed has been increasing over the past few years. Rapeseed oil is now approaching 30 percent of all edible oils consumed in Canada. This trend is expected to continue as long as rapeseed oil remains competitive with imported edible oils.

Even if markets do not remain available in the European Community in 1970-71, prospects are good for additional exports to Japan, and for additional domestic consumption. It would appear desirable that 1970 acreage be maintained at about 2.2 million acres. Over the longer term of the next 5 years, continued increases in domestic use and exports will justify an increase in Canadian production. However, prices are likely to fall well below 1969 levels in 1970-71 if production in 1970 substantially exceeds 40 million bushels.

Soybeans

With the loss of 5-percent tariff preference in the British market, exports of soybeans and meal over the next 2 years will decline still further.

Price will be a problem in 1969-70. With the crop in the United States likely to add somewhat to the surplus which was already over 300 million bushels to start the crop year, U.S. prices are likely to be down around the loan level but could improve as the season progresses. Canadian prices likely will be lower in keeping with U.S. prices for beans and meal; but with continued upward consumption of soybean meal, they too are expected to improve as the season progresses.

There is ample scope in terms of the size of the domestic market for additional production of soybeans in Canada; imported beans crushed in Canada currently amount to the equivalent of production from about 400,000 acres. While physical limitations to major expansion exist at present, the upward trend in soybean acreage should continue.

Higher prices are likely to remain for the rest of the crop year for sunflowerseed, since there are indications of poor crops in Eastern Europe. If East European production is quite low, as currently forecast, there will be a problem of rebuilding stocks in various markets and the prospects for 1970-71 also are likely to be good. To keep the supply steady, an increase in Canadian sunflower acreage of sizable proportions seems desirable, the Outlook paper concludes.

Beef

Beef prices have been strong so far this year, owing partly to consumer demand and partly to the fact that some producers have been retaining heifer calves. The Outlook paper states that some buildup of breeding herds is expected this winter, but this will not significantly increase beef slaughter before the late summer and fall of 1972. These growing breeding herds indicate that some grain producers are changing to livestock production as a means of converting grain to a salable product.

It does not appear likely that the average price of fed cattle in 1970 will rise to any marked extent above the export equivalent (the price at which Canadian cattle will move to U.S. markets). However, there may be grounds to predict that prices in Canada will be above the export equivalent to some extent at certain times during 1970.

The Outlook paper calls long-term prospects for beef encouraging. Present population and consumption trends indicate the need for at least a 36-percent increase in North American production by 1980 to supply the market then.

Pork

The September 1, 1969, Quarterly Pig Survey showed that the hog population in western Canada was 11 percent higher than a year ago, while there was a 1-percent increase in eastern Canada. Hog numbers were 26 percent higher in Saskatchewan and 16 percent higher in Manitoba, showing the magnitude of herd expansion in wheat-producing areas.

Hog marketings during the first 6 months of 1970 are expected to be 8 to 12 percent higher than for the first half of 1969, based on indications that farrowings during September, October, and November could be about 11 percent higher than during the corresponding months in 1968. Marketings during the second half of 1970 will depend on the size

of spring farrowings, which is expected to be somewhat larger than in 1969. Therefore, in 1970, total inspected hog marketings in Canada are expected to be about 15 percent higher than in 1969, possibly exceeding the 1959 total of 8.6 million.

Poultry

Chicken prices in Canada this fall and winter are expected to remain below year-ago levels, with the extent of the decline partly dependent on red meat price levels. This indicates a favorable outlook for a modest expansion of consumer demand for chicken in 1970. However, per capita consumption of chicken in 1970 is not expected to rise as much as the 3-pound 1969 increase unless there is a sharp reduction in poultry meat prices.

Most of the increased supply of chicken in 1970 is expected to appear during the first half of the year.

The Outlook paper states that *turkey* prices, which have been subject to a strengthening influence since the fall of 1967, are likely to reach peak levels in both Canada and the United States before Christmas. The market outlook in Canada should be improved by an expected strong consumer demand in the fourth quarter of 1969 and by a relatively low carryover of storage stocks in 1970.

Turkey production in 1970 in both Canada and the United States is expected to expand slightly from the 1969 output. In Canada the fast growth of broiler turkey production will likely account for most of the overall increase.

The Outlook paper states there is a strong possibility that the Canadian shell *egg* market will be overproduced in the first half of 1970; production of replacement pullets for egg production in January-August was 13 percent higher than a year earlier. Egg prices to producers could drop to 25-30 cents a dozen for all grades in Canada during the second quarter of 1970 compared with an average level of 35 cents in the same quarter of 1969.

However, the fact that U.S. shell egg prices are not expected to drop sharply, high losses from Marek's disease in Canada, and the recent high rate of fowl marketings in Canada should restrict the extent of the egg price decline during the first half of 1970. On the other hand, a higher rate of lay may be expected because most laying flocks will consist of young birds.

The volume of egg marketings will likely remain large during the second half of 1970 with no substantial upturn in prices likely until layer numbers begin to decline. The paper states that layer numbers in Canada are expected to rise continually until at least mid-1970.

Dairy

The dairy Outlook paper states that total milk production in Canada in 1970 will likely expand beyond the level of 18.3 billion to 18.5 billion pounds at which production has been stabilized during 1961-69.

Sales of fluid milk on a volume basis are expected to rise, but the use of butterfat in fluid milk is expected to be lower, largely as a result of higher sales of 2 percent milk. Cheddar cheese production is likely to remain at the 1969 level, while domestic consumption is expected to rise slightly, leaving about 30 million pounds available for export.

For the third consecutive year, consumption of creamery butter is likely to be less than production, leaving an estimated surplus of about 35 million pounds. Increased production of nonfat dry milk is expected to continue. The paper forecasts output for 1970 at about 400 million pounds, leaving a surplus of 220 million pounds available for export.

In the aggregate, milk production is expected to rise as consumption declines, causing serious pressure on price levels and market structures.

Apples, potatoes

Canada's 1969 production of apples, estimated at 21.9 million bushels, was 9.4 percent higher than the previous year. Domestic consumption, especially of processed apples, is growing steadily.

However, the export market outlook is discouraging, with some of Canada's European customers themselves becoming apple exporters. Apple production in other areas is also increasing. The Outlook paper advises that no further plantings are required in light of present production potential.

Canadian potato production in 1969 is estimated at 50.2 million hundredweight, down 5.1 percent from the 52.9 million hundredweight produced a year ago. However, the paper predicts that the U.S. crop will be about 5 percent larger than last year, so that North American supplies are higher and prices for fresh potatoes will likely be low in Canada.

Tobacco

Domestic demand for tobacco appears fairly stable, although this might be adversely affected by tax increases or by antismoking campaigns. The Outlook paper suggests that more growers will look to export markets to sell a larger proportion of their production. The paper sees potential for export growth, if prices do not show any substantial increase and if present promotional activities are continued.

(At the time the tobacco Outlook paper was prepared, in mid-September, the 1969 Canadian flue-cured tobacco estimate was 217 million pounds. The U.S. Agricultural Attaché in Canada has since revised this figure upward to a record 230 million pounds, 19 million higher than last year.)

Wheat As Feed in Canada

The surplus supplies of wheat in Canada this year have occasioned considerable research and comment on the role of wheat as a livestock feed. Two articles in the December issue of *Country Guide* are typical.

Cam Brown, Manitoba Department of Agriculture nutritionist, states that wheat can be used successfully in any livestock ration. The key point is to avoid sudden changes in the amount fed. When given wheat only, cattle tire of it; but it blends well with barley in cattle rations, and its high protein level makes protein supplements unnecessary for beef cattle, though vitamins and minerals need to be supplied. It is an excellent energy source for dairy cattle, too, and cuts down on the need for protein supplements.

Brown estimates that if the barley price is Can$0.99 per bushel, a farmer can afford $1.36 per bushel for wheat if he needs both energy and protein, or $1.28 for energy alone. If barley costs $0.70, wheat prices could be $1.09 and $0.99.

Harold Clapp, Ontario Department of Agriculture and Food dairy cattle specialist, calling the feeding value of sprouted wheat equal to that of grain corn, says that if properly dried it can make up 40 percent of the grain in dairy cattle rations and replace barley or corn in rations for beef cattle and swine.

1970 Soybean Export Outlook Is Bright

The following article is excerpted from a speech given by Raymond A. Ioanes, *Administrator, Foreign Agricultural Service, at a meeting of the Iowa Soybean Association at Iowa State University, Ames, Iowa, earlier this month.*

As I look back at the United States overall export record, I find that we've had our ups and downs with many commodities. But one stands out from all the rest—soybeans. Since 1954, with the exception of 1 year, there has been an unbroken upward trend in soybean shipments.

We produce soybeans for the world as well as for ourselves. U.S. soybeans account for 90 percent of the world's trade in this product. American farmers—who have pushed annual harvests from around 300 million bushels in the early 1950's to about 1.1 billion bushels in 1969—produce three-fourths of the world's total soybean output. Soybeans are our No. 1 export dollar earner. In 1956, U.S. shipments of soybeans and products had a value of $263 million. This year they'll have a whopping value of $1.2 billion.

The keys to success

What accounts for the amazing success U.S. soybeans have had in export channels? Let me mention five points:

- We are the world's most efficient producer of soybeans. Nowhere else in the world is there the same ideal combination of climate, soil, mechanization, and technology that exists in the United States. This combination makes it possible for us to produce in great abundance a superior product.
- The increasing prosperity of the world has made it possible to move ever-larger crops into consumption. Expanded purchasing power has enabled foreign consumers to step up production and consumption of livestock products, as well as to increase their intake of fats and oils. Both developments have supported expanding exports of soybeans and products.
- Soybeans have duty-free entry to the world's largest market—the European Community—and to several other countries, including Canada, the United Kingdom, Denmark, Norway, and Israel. In other words, these countries have given us what are called "bindings"—assurance that there will not be a change in the zero duty. The United States, in turn, has "paid" for these valuable concessions by giving the other countries duty reductions on their products entering the U.S. market.
- Our responsible trade policies have stood us in good stead when foreign ministers have taken our side in efforts to improve our access to markets, or to combat threats to existing access arrangements. Except for some shipments of oil under P.L. 480, soybeans have stood on their own feet. U.S. soybeans have been sold for export at the same price they have sold for in the United States. We have not dumped soybeans on the world market when our supplies were large. We have not used subsidies as a market penetration device. We have, instead, stored our soybeans when necessary to keep them from glutting world markets.
- Action by the Department of Agriculture this year to reduce the support price of soybeans is being translated into expanded exports. The duty-free access we have in the European Community and other countries assures us that any price reduction by us means a comparable drop in the importing countries. This means that we stimulate the utilization of beans when we make them more competitive with other oilseeds entering the same market, and on the demand side, we also encourage greater total use of meal. The same is not true of commodities affected by variable levies. For example, when we lower the price of wheat by 10 cents a bushel, the European Community simply adds 10 cents to the variable import levy, thereby offsetting any internal advantage we otherwise would gain.

We are now following a produce-for-use policy in this country. We want our soybeans to move into consumption. And they will move into consumption. Only 87 percent of the 1968 crop moved into the market in the 1968-69 year. However, with more realistic prices, the Department of Agriculture estimates that over 96 percent of the 1969 crop will be utilized in the current marketing year. The demand for soybeans this year has increased about 100 million bushels—equivalent to the production of 4 million acres of cropland, and equivalent to about two-thirds of the soybeans you produced in Iowa this year. Over 100 percent of the 1970 crop should be utilized during the 12-month period. That would mean some reduction in the carryover, which is now more than 300 million bushels.

Short-term outlook

All these factors are important in the export situation. Now let's take a closer look at near-term prospects.

USDA analysts are saying this year the same thing they've been saying in other years: "Exports of oilseeds and products continue to be the brightest spot in the overseas marketing picture." Total soybean shipments will be up from 287 million bushels last year to about 335 million this season—a gain of almost 50 million bushels. Over the preceding 3 crop years, soybean exports increased at an average annual rate of only 10 million bushels. Incidentally, exports of 335 million bushels are more than we produced 15 years ago.

We'll also do well this year on exports of meal. Shipments are expected to total about 3.4 million short tons. That's a gain of 300,000 tons over a year earlier, as compared with an annual increase of only 160,000 tons in the preceding 3 crop years.

We should export at least as much soybean oil this year as a year earlier. Although the bulk of these exports will continue to be P.L. 480 oil, commercial sales are being made at an encouraging rate.

U.S. prices of soybeans have held close to the loan level in recent weeks. Prices of oil, however, have been unusually strong, topping 11 cents a pound at one point—the highest since the winter of 1966. Recently, as the crush has increased, there has been some weakening in U.S. oil price levels.

Overseas, as in the United States, prices of fats and oils have risen sharply as a result of continued strong demand in relation to rather limited supplies. Stocks of soybeans, other oilseeds, and some oilseed products were drawn down in expectation of lower prices in 1969-70 resulting from the reduction in the U.S. soybean loan rate. At the same time the Soviet Union—for reasons known only to the Russians—kept their oilseeds and products out of world markets.

This Russian sunflowerseed and oil situation deserves a closer look.

The Russian situation

An apparent absence of Russian vegetable oil sales since the end of August has caused many to conclude that the Soviet sunflowerseed crop is down sharply this year. However, USDA experts on Russian matters feel that Russian oilseed and oil production in 1969 will not differ much from levels reached in 1968, when Russia exported 770,000 metric tons of oil. Our analysts believe that if the Russians have, in fact, stopped exporting oil, the more likely causes are late harvesting, delayed crushing, or possibly, a shift in policy with respect to domestic consumption.

The latter possibility is interesting. There undoubtedly has been a struggle within Russia between those who want improved domestic consumption of vegetable oil as was promised earlier and those who feel that the country should earn foreign exchange through oil exports. In 1966 the foreign exchange advocates won out. That year per capita consumption within Russia was reduced so that exports could be increased. Shipments rose sharply, and expanded still further in 1967 and 1968. In early 1969, however, world prices for sunflower oil were relatively lower than in previous years. The Russians also had to surmount an extra European Community duty of $50 a ton—though that levy was gradually reduced and finally removed in October 1969. It is possible that during the period of low price and high duty a decision was made to step up domestic consumption.

Sunflower oil production in southeast European countries and Argentina will be higher. In India the monsoons seem to be developing favorably in the peanut area and prices of peanut oil have declined sharply. Senegalese and Nigerian peanut production and export availability, including oil and meal, should be up. Exportable supplies of palm oil, particularly from Malaysia, will continue to increase. Supplies of fish oil, on the other hand, appear to be down.

Underlying developments

There have been some encouraging underlying developments.

First of all, let me mention the European Community's earlier proposal to put an internal consumption tax of $60 a metric ton on vegetable and marine oils and $30 a ton on oilcake. This proposal would have seriously jeopardized our $500 million a year market for these products in the Community. Recently, however, Dr. Sicco Mansholt, vice president of the European Community Commission, indicated that such taxes are highly improbable during 1970. This indeed is heartening news. I'm sure that everybody in Europe understood the very deep concern in the United States about the possible impairment of an extremely valuable market.

Now we are hearing about a proposal ostensibly aimed at improving and stabilizing world prices of fats and oils, as well as raising export earnings of developing countries. The plan would provide that developed importing countries—including the European Community, the United States, and Japan—apply a tax on all imports of oilbearing materials. Some proceeds of the taxes collected would be transferred to developing country exporters. In the U.S. view, a tax is a tax—and taxes under the proposal would be just as damaging to our trade as the internal taxes proposed earlier. The United States, therefore, could not accept this proposal or any other—which would impair our duty-free access to the Community and other countries for oilseeds and oilcake.

I'm glad to say that Japan has taken some limited action to improve our access to that market for soybeans and meal. One phase of this action traces back to the Kennedy Round of trade negotiations when Japan agreed to remove, by the end of 1971, half of its import duty of 33 cents a bushel on soybeans. Secretary of Agriculture Hardin formally requested that this action be speeded up and the entire duty be removed. Japan compromised by agreeing, subject to ratification, to advance the date to April 1, 1970, for removing half the duty. Japan also has agreed to remove its quantitative import restrictions on soybean meal. This action, now expected to be implemented by 1972, combined with the duty reduction on soybeans, should add 8 to 10 million bushels to our exports to Japan.

Market development activities

No product—even one as good as soybeans—reaches its full export potential without promotion effort. This has been well demonstrated through the cooperative government-industry market development programs carried on in recent years. Over that period there have been many successful efforts to stimulate sales of soybeans and products. Market promotion has produced especially good results in the European Community, in Spain, in Japan. It has produced good results in smaller countries. Altogether this special kind of sales effort has played a big role in keeping the trend of soybean exports headed upward.

At this point I want to mention a key word—money.

Adequate funds to work with are an indispensable requirement of all organizations. I'm glad to note, in this connection, that the American Soybean Association (ASA) is making headway in obtaining funds for carrying out market development work on an expanded scale. A good program will require at least half a million dollars from ASA the first year, and more in the years ahead. The Department of Agriculture, of course, will at least match ASA's contribution as a cooperator.

I understand that two States—Louisiana and South Carolina—have passed legislation that will put them in a position to make market development funds available. I sincerely hope that all of the heavy producing States, which have the most to gain from foreign markets, can soon make their contribution. But as somebody has said, money for market development is hardly a "contribution;" it is really an "investment"—an investment in assuring that the upward trend in soybean exports will continue upward.

We can't afford to overlook opportunities. For example, there may be opportunity in the fact that Italy's hog production pattern is changing. Italy today is swinging in the direction of fresh pork. Per capita consumption of pork in Italy averages around 20 pounds per year—as compared with 66 pounds in the United States. So the potential is there for more pork—and for more feed. That feed, considering the shift to lean meat, implies a need for not only more corn and grain sorghums, but also for other feed ingredients, including soybean meal.

The Foreign Agricultural Service is carrying on continuing market surveillance work in Europe. FAS, you may be sure, wants to cooperate with the ASA in every sense of the word.

Another difficult year

Australian Wheat Production and Storage Problems

Australia's 1969-70 wheat crop is now estimated to be around 425 million bushels, down from 540 million in 1968-69—a record year. The biggest production decrease is in New South Wales which, combined with Queensland, is the principal hard wheat area of Australia. As a result of this decrease, Australian prime hard wheat production may total less than 10 million bushels, compared with about 60 million bushels a year ago.

The total New South Wales wheat crop was projected at 255 million bushels in September. Then, because of drought, early frost, and heavy rains in the 2 weeks which ended November 25, the estimate was dropped first to 195 million bushels and more recently to 150 million. (Total New South Wales production in 1968-69 was 210 million bushels.) Because of this drop New South Wales may produce less than 5 million bushels of prime hard wheat, against earlier prospects of 30 million.

The Queensland Department of Agriculture in its latest report on the Queensland wheat situation indicates that the central Queensland wheat crop was virtually wiped out by drought and that only 100,000 bushels of wheat were delivered into the storage system from that area. Last year, that region produced nearly 5 million bushels of wheat, most of which was prime hard. The other main grain-producing area in Queensland, the Darling Downs, is still expected to harvest about 17 million bushels—although the Department has qualified this estimated by stating that harvesting has been delayed by the recent rains and that the final figure could be somewhat lower. Some estimates are as low as 12 million bushels for the 1969-70 crop. Last year, Queensland produced 42 million bushels of wheat in all.

On the basis of early deliveries only about 25 percent of the Queensland crop will grade prime hard, compared with 85 percent normally. About 25 percent is expected to fall in the f.a.q. standard grade, and about 50 percent will be off-grade. Consequently, only a small amount of Queensland prime hard wheat will be available this season.

Forecast for other wheats

The Victorian Department of Agriculture has predicted a total 1969-70 wheat harvest of 85 million bushels. This is about 6 million less than the record crop harvested last year, but 33 percent above the average for the past 10 seasons.

The South Australian Department of Agriculture has forecast a crop of 67 million bushels, 16 million bushels less than last year's record crop of 83 million bushels. In South Australia—largely a semihard wheat area—in contrast to New South Wales, the weather has been relatively dry during the past few months and protein content in many of the semihard wheat areas is believed to have been well above average.

As a result, a large part of the South Australian crop may have turned out to be close to prime hard and could be acceptable to traditional buyers of Queensland and New South Wales prime hard. Thus, the Australian Wheat Board hopes to maintain sales to many hard wheat customers—even with the short crops in the principal hard wheat areas of Queensland and New South Wales—by shipping hard wheat from South Australia.

Western Australia—a soft f.a.q. wheat area—expects to harvest 68 million bushels of wheat in 1969-70. This is down from 112 million bushels in 1968-69.

Carryover and storage

Latest reports indicate that the carryover at the end of November will total about 255 million bushels of unsold wheat plus about 20 million bushels sold but not yet shipped. A crop of 425 million bushels would bring the total supply as of December 1, 1969, to about 700 million. Domestic requirements during 1970 are expected to total 90 million bushels—40 million bushels for human consumption and about 50 million for feed and seed. Accordingly, about 610 million bushels will be available for export sales as wheat or flour.

Even with the new sale of about 82 million bushels to Mainland China, the best export level likely to be achieved is about 300 million. Under these circumstances, the December 1, 1970, carryover may exceed 300 million bushels. Thus, it is unlikely that the 1970-71 delivery quota could be set much above 250 million bushels.

The bulk of the present carryover is held in southern New South Wales, Victoria, and South Australia. Many growers will have to hold their wheat on the farm for extended periods because the construction of temporary storage has been held up through disputes over who should meet the cost. As a result, increasing numbers of growers are contracting forward with feed millers and other grain users, except flour mills, to sell across the border under the protection of a section of the Australian Constitution which guarantees freedom of inter-State trade.

In recent weeks the price of such "black market" wheat has fallen to about $A0.60 per bushel, which in turn has affected the price of oats in the free market—quotations are as low as 16 cents per bushel at farm gate. Industry organizations and the government are becoming increasingly concerned about this trend; and in late November the Minister for Primary Industry announced the formation of a committee to study the possibility of illegal trading in wheat. The committee will hold a watching-brief on action that might be needed at harvesttime. However, it would take close Federal-State cooperation to prevent sizable diversion of wheat from the normal marketing channels, and committee advice might be too late to be effective.

The president of the Stockfeed Manufacturers' Association of New South Wales recently stated that Queensland wheat is now offered in northern New South Wales at prices ranging from A$1 to $1.30 per bushel despite the fact that the Queensland crop is only 25 percent of what was originally expected. Poultry feed manufacturers have been the major buyers, and have been able to reduce the price of compounded poultry feeds by about $4 per long ton. Th president said that while his association never encouraged trading outside the Wheat Board's control, it was unrealistic to expect stockfeed manufacturers to buy feed from the Wheat Board when competitors are free and able to purchase wheat from inter-State sources at prices below those charged by the Board. Thus, the Australian Wheat Board will probably have little chance this

season of selling the 20 million bushels that has been taken up by stockfeed millers in recent years.

As a solution, a newly elected Labour Member of Parliament recently asked the government to abandon all wheat quota restrictions for the current crop and pay the fixed A$1.10 in advance on every bushel delivered. He said that such action would cost taxpayers little because the overquota wheat would only amount to about 43 million bushels, A$47 million. Although this seems high, he said that the only alternative is abandonment of large quantities of wheat to the black market and consequent losses to growers.

Outlook

A number of industry spokesmen are now advocating the creation of a new wheat pool for feed wheat in order to achieve greater efficiency in Australia's wheat industry. They propose, in addition to a milling-wheat pool run on the same basis as the current pooling system, a second, feed-wheat pool for wheat to be sold on the domestic and export markets at a significantly lower price—probably somewhere around A$1 per bushel. Proponents of this change argue that the outlook for feedgrains is much better than for wheat for human consumption: ocean shipping rates are on a volume basis and because wheat is heavier than oats and barley it has a freight advantage in terms of weight. Also, it is more attractive because of its higher feed value.

In line with this two-pool marketing system, and as an aid to Australia's wheat production and trade, some industry spokesmen believé that Australia should follow Canada's example and pursue a dual wheat-breeding policy. Such a policy would aim for the growing of high-quality human consumption wheat in areas where it grows best—central and northern districts—and for the growing of suitable high-yielding stockfeed wheat in areas with high rainfall which best yield low baking quality wheat—southern areas of the wheat belt.

These proposals are not likely to be adopted in the immediate future. However, they are indicative of changing trends in the industry and could well be a sign of future developments.

—Based on dispatches from *Office of U.S. Agricultural Attaché, Canberra*

Switzerland Implements New Dairy Regulations

Recent setbacks in Switzerland's fight against overproduction of milk have motivated the Swiss Federal Council to announce new dairy measures, effective November 1, 1969. Until the fall of 1969, Switzerland seemed to be winning its tussle with surplus production; then unusually excellent weather accelerated milk output, and milk deliveries increased nearly to the levels of 1968.

The new dairy policies are compromises between the Swiss Milk Producers' Union and the government. The government feels the compromises will hold milk deliveries during 1969-70 milk marketing year (Nov. 1, 1969 through October 31, 1970) to the desired 2.5 million metric tons—or about the same as the previous marketing year. Swiss milk production in 1966-67 was 2.6 million metric tons and in 1967-68 reached 2.7 million tons.

The basic agreement is that the government will reduce the amount withheld from the producers' guaranteed milk price in return for the producers' taking back any surplus milk production in the form of powdered whole-fat dry milk for feeding to beef cattle. Any surplus milk not returned to producers will bear a processing charge of approximately $0.045 per quart.

An important adjunct to the whole-fat dry milk scheme is that overproduction of milk will be judged for individual milksheds rather than for the nation as a whole. This innovation could result in a long-term geographic restructuring of Swiss milk production.

Other important decisions announced in the new measures are:

- Up to the maximum amount allowed by existing legislation, almost $18.5 million, will be utilized for the 1969-70 milk year for the costs of various dairy programs. The money comes from general tax revenues, and the government has never before authorized its use for dairy programs. Any dairy program expenses above $18.5 million, however, will be payable from producers' funds collected by withholding part of the farmers' guaranteed milk price.
- Maximum delivery goal for the 1969-70 milk year is raised from 2.45 million metric tons to 2.5 million.
- One-third of the amount withheld from producers' guaranteed milk prices will be used to reduce cow numbers and to help Swiss to switch from dairy to beef operations.
- The Division of Agriculture is authorized to expend $57,500 on the promotion of soft cheeses. A like sum is earmarked for the market promotion of cream, provided the Milk Producers' Union contributes an equal amount.
- Swiss farmers who are not members of the Milk Producers' Union are required to pay almost $0.06 per quart of milk delivered towards milk-product promotion costs.
- About $1.45 million worth of milk powder and cheese will be donated to world relief.
- Milk deliveries must be tested for antibiotic content. Starting May 1, 1970, lower prices will be paid for milk containing antibiotics.

—Based on dispatch from ALAN W. TRICK
U.S. Agricultural Attaché, Bern

World Bank Loan to Morocco

The World Bank has made a loan equivalent to $46 million to Morocco for the integrated development of irrigation and improved dry farming on 222,000 acres in the Rharb Plain. This is the first stage of a plan to develop the 500,000-acre Rharb, which lies in the Sebou River Basin and contains some of Morocco's most important underutilized land and water resources.

The project will make possible a fivefold increase in the net value of agricultural production in the area. It will also provide an example of integrated land development in both irrigated and rain-fed areas for all of Morocco.

This irrigation project is the first to be undertaken under Morocco's new Agricultural Investment Code, which sets forth policies and procedures for the development of irrigated areas and land redistribution. The project includes the construction of the Idris I Dam upstream at Arabat on the Inaouene River; land preparation, and the construction and improvement of irrigation and drainage systems; improved rain-fed farming; and roads and processing plants.

Plants and Perfume

—lifeblood of a city and boost to a nation's economy

Flower power in France has nothing to do with long hair and love beads. It's the economic power generated by the production of flowers and aromatic plants in the southeastern part of the country and the processing of these plants, along with numerous imported ones, for their fragrant essences and aromatic oils. These substances are the basis of France's world-renowned perfume industry—a $500-million business —and are used in many other products as well.

Nerve center of the extraction industry is the city of Grasse, historic perfume capital of the world since the 1500's even though very little finished perfume is now produced there. Perched in the hills about 20 miles east-southeast of Nice, Grasse has changed little in outward appearance over the centuries. Its tile-roofed houses face steep streets that wind toward the farmland below. Ten miles beyond lies the Mediterranean. Flowers abound within and about the city, making Grasse seem like a manor in the midst of a vast informal garden. Only the chimneys of the city's 19 extraction plants and the potpourri of delicate scents in the air distinguish Grasse from many other medieval Mediterranean towns and reveal the activities that take place behind its doors. Last year, these factories had a turnover valued at nearly $70 million in oils, waters, and extracts for domestic use and for shipment all over the world. Thus Grasse, despite its exterior quietude, is truly an industrial and commercial center.

Nature's own flower garden

The countryside surrounding Grasse—indeed most of Provence and the southern part of neighboring Rhône Alpes—is climatically and geographically ideal for the cultivation of flowers. Sheltered from behind by the pre-Alpine Mountains running from east to west, the region is spared the blast of the north wind and other chilling effects of winter. The temperature rarely falls below the freezing mark and averages 48°F. in winter and 75°F. in summer. Fog is nonexistent, and one would have to arise very early on a spring morning to catch even a fleeting glimpse of mist. Dry and warm with luminous sunshine, the summers are freshened by a benevolent sea breeze. The soil is generally rich, and with summer irrigation, it literally pours forth its fragrant and colorful plants as it has for centuries.

The processing of flowers and plants for their fragrant essences in Grasse dates back to the middle of the sixteenth century. A Florentine accompanying Catherine de Medici through southern France noted the abundance of flowers cultivated strictly for their beauty. He later returned to build Grasse's first flower distillery. Prior to that time, Provence was a region of olive growers and shepherds. Its primary industries reflected the pursuits of its farmers—the manufacture of olive oil and soap and the tanning of leather. Its most skilled artisans were its glovemakers, who later added perfumed waters and oils to their lines. To this day, gloves and perfume are sold side by side in many fine French shops. But in Grasse, these older professions have disappeared, while the extraction of essences prevails and predominates all else.

What plants do the processors of Grasse use to obtain their fragrant oils and waters? Those grown largely in Provence and in other parts of France fall into three categories: Flowers, aromatic plants (herbs), and fruits. A fourth category, generally referred to as exotic plants, consists of raw materials imported from all over the world, chiefly from tropical areas.

Most of the flowers and aromatic plants are grown on small, family-type farms that also produce fruits and vegetables. Flower growing is frequently looked upon as a sideline, something to pursue when the market is good, to abandon when it is not. Among the flowers the most important are jasmine, orange blossom, and rose.

The sweet three

Jasmine is the queen of the perfume industry, used in nearly all the most expensive fragrances because of its fine, exquisite scent. The jasmine grown in Provence originated in Hindustan and has been grown in the area only since 1860. Its five petals are gray-white, lightly frosted with pale pink toward the center. Jasmine begins to blossom in late July and continues to do so for 3 months, considerably longer than any of the other flowers grown locally. Although all the flowers are cut by hand, jasmine is the most needy of hand labor because new blossoms appear each night and must be gathered as soon after sunrise as possible. They also must be processed that same day. Last year's harvest amounted to about 700,000 pounds. It takes 800 pounds of jasmine flowers to produce just 1 pound of the pure, concentrated oil known as jasmine absolute, and there are nearly 5,000 jasmine flowers to a pound. No wonder jasmine essence has been quoted at $88 per ounce and kept in locked vaults.

The orange trees of Provence are not the common fruit types, but several varieties of the Seville orange tree, a type with sour red fruit but blossoms of thick white petals rich in fragrance. Brought to Provence by the Phoenicians, the trees are cultivated on terraces exposed to the south, southeast, and southwest. Nearly every part of the tree is processed: The buds are dried; the flower yields essence of neroli —concentrated orange-flower oil—as well as orange water; the leaves and branches are distilled for the essence called pettigrain; the fruit peel is dried and used in aperitifs or processed for its oils; the fruit itself is used in confections and marmalades. Last year, the harvest of orange blossoms in Provence totaled some 792,000 pounds. It takes 1,000 pounds of orange flowers to make just 1 pound of neroli.

The rose cultivated in Provence is the May rose or rose of Provence, a hybrid of one brought from Asia Minor and an indigenous variety. Its flowers are smaller and, far more fragrant than those of the more well-known ornamental roses. The flowers are harvested every morning during May. Last year, the rose harvest in Provence topped that of any other flower, totaling over 793,000 pounds. A ton of flowers is

required to produce just 1 pound of essence, a basic ingredient in many perfumes.

Other flowers among the 100 or so produced for processing are the violet, mimosa, narcissus, broom, geranium, carnation, jonquil, rockrose, tuberose, and hyacinth. Violet essence comes from the leaves, not the flowers, of the plant. Last year's harvest in Provence totaled 600,000 pounds. Other available figures show harvests of 367,000 pounds of broom, 227,000 of mimosa, and 194,000 of narcissus.

Shades of lavender

Probably the most noted of the aromatic plants gathered and processed in Provence are lavender and lavendine, members of the labiate family that also includes thyme, rosemary, mint, and marjoram. Lavender grows wild at altitudes between 2,400 and 6,000 feet. At one time, farmers were content to cultivate plants uprooted from the mountains; now, they have developed numerous varieties and cultivate only the better of these. Lavendine is a cross between lavender and spike-lavender and thrives at lower altitudes. While lavender yields a very fine essence, that of lavendine is heavier and more camphorous. However, lavendine yields are about three times higher than those of lavender, leading farmers to abandon cultivation of the latter in favor of the former. Recent surveys showed about 15,000 acres of lavender and 35,000 of lavendine under cultivation, providing leaves and flowers for 600 tons of essence. It takes about 125-175 pounds of lavender to produce 1 pound of essence.

Other aromatic plants produced domestically and processed in Grasse include spike-lavender, eucalyptus, thyme, rosemary, tarragon, basil, mint, sage, oak, and pine moss.

Hundreds of tons of fruit also are harvested locally or brought in from other parts of France for processing. They include oranges, lemons, strawberries, raspberries, cherries, apricots, and pineapples. These fruits are processed for their juices, oils, extract, pulp, and peel for use in confections, sirups, liqueurs, marmalades, and other edible products. In fact, the edible-product side of the Grasse industry is getting bigger, accounting for over $7 million of last year's turnover.

Harvest of the flowers, plants, and fruits is almost exclusively a hand operation. That of the flowers is left largely to women and children. The harvest is graduated, beginning as early as January and running as late as November. First of the plants to be picked is the violet, which appears in Provence in January-March. In February, the mimosa blooms, and in April, the jonquil. Peak season, of course, comes in May-September with the rose and orange blossom of spring followed by the jasmine, tuberose, and lavender of summer. The fruits, too, are ripe at this time. During this period, many pickers cross the border from Italy, especially for the jasmine harvest. Finally, the harvesting ends with the approach of winter and the gathering of rosemary, rockroses, scarlet sage, and cherry laurel.

When there are no local plants to process, the factories of Grasse still hum with activity. Local flowers and plants may have started the extraction industry on its way to world fame, but imported raw materials certainly have been instrumental in keeping it there. The imports come from all over the world: Camphor from Japan, Chinese aniseed from Mainland China, ylang-ylang from the Philippines, spices from the East Indies, pachouli from Malaysia, cinnamon and cloves from Ceylon, sandalwood from India, cloves from Tanzania, vanilla from Réunion and the Malagasy Republic, balsam from Central America, and irisroot from Florence.

The processors' techniques

Until the middle of the last century, the artisans of Grasse used primarily one method—simple distillation—to capture the scents of their flowers and other plant material. They allowed a jet of steam to carry off the essence, then condensed this vapor to obtain a mixture of water and essential oil. The perfumed water was then siphoned off, leaving only the concentrated oil. This method is still in use.

By the turn of the century, two other important practices had come into use—*enfleurage* and extraction. In *enfleurage* the flowers are placed in a fatty substance, which absorbs their perfume. The perfume is then removed by washing in alcohol. Extraction involves placing the flowers in a volatile solvent such as ether or benzine. The solvent extracts the waxy essence called concrete from the flowers. The concrete is drained off in alcohol. The solutions obtained are filtered, then frozen, refiltered, and concentrated under pressure. In this way, one gets absolute, the pure, concentrated flower oil, which can then be subjected to various further treatments.

Other processes are in varying degrees of use. Some substances, orange rinds and rose petals, for example, are simply dried by air or in an oven. Fruits are processed by simple pressure to squeeze out the juices; by scraping the rind under a fine shower to release the essence, which is carried off by the liquid; or by steeping in alcohol, which picks up the essence and is later distilled.

The largest percentage of the substances produced are, of course, used by the perfume industry. One source estimates this proportion at 73 percent. Soap and detergent making account for another 10 percent; edible products, 8 percent; pharmaceutical products, 5 percent; and drysaltery, 2 percent. The other 2 percent is diffused among the numerous other industries employing scented oils, waters, and extracts.

The extraction plants at Grasse are nearly all family enterprises, some of which date back many generations. They employ roughly 2,000 people. One of the major factories has an annual capacity to produce 575,000 pounds of essences and extracts, 990,000 pounds of synthetic products, 130,000 pounds of products for the edible industries, and 65,000 pounds of substances for pharmaceutics.

The trade picture

Sixty percent or some $41 million worth of the Grasse production last year was exported, the principal buyers being the United States, Japan, the United Kingdom, West Germany, Switzerland, Italy, the Soviet Union, and Spain. By value, exports were up $13 million from the 1964 level. U.S. purchases of scented oils and flavoring extracts from France last year were valued at $7.4 million and included a wide selection of the substances produced, from almond oil to ylang-ylang.

This trade is no one-way street, however. Even though the United States has no equivalent of Grasse, it sold France $3.7 million worth of essential oils, resinoids, and synthetic perfume and flavoring materials last year.

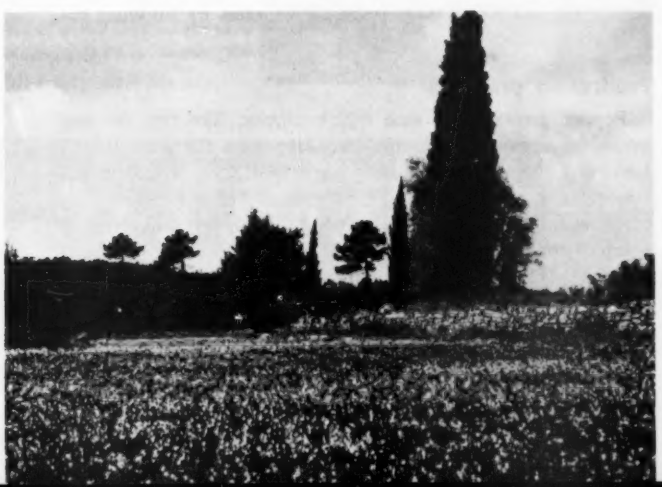
Of the 40 percent of the Grasse production that is utilized domestically, a high proportion goes to the perfume industry in Paris, center of France's perfume production. Here, at modern plants, expert perfumers mix and blend numerous

Men cut through field of lavendine destined for the factories of Grasse.

The Perfume Process—From Field to Flacon

Left, women gather roses in a garden near Grasse; it takes a ton of these roses to produce a single pound of essence. Below, rooftops of Grasse, perfume capital of the world since the 1500's.

Left, women package perfume at the Parisian factory of a world-famous producer. Below, typical Provence scene: a field of flowers, an old stone fence, and a variety of trees.



ingredients to create the enticing scents known all over the world. Like the plants in Grasse, the perfumeries may be family enterprises, with secret formulas passed down from father to son like family jewels—and like jewels, kept in locked vaults. A perfume usually contains more than 100 different ingredients—both natural and synthetic—and one popular French scent is said to comprise 350.

The Grasse processors have penetrated the Parisian—indeed, the world—perfume industries through their years of invention and experimentation in extracting essences from natural materials and, more recently, in creating scents artificially. They are the rulers of the kingdom of scent. However, they do not rule unchallenged. Their primary competition in natural perfume substances comes from countries with large supplies of cheap labor. Southern Italy is a close competitor in production of jasmine; roses abound in Morocco and Bulgaria; lavendine is cultivated in Sicily, Egypt, Morocco, and Tunisia; and orange blossoms are processed into neroli in Italy, Tunisia, Algeria, and Morocco.

Competition and chemicals

This kind of competition does not so much affect the Grasse extractors, who themselves have interests in plantations overseas and are also big in the chemical line, as it does the farmers in Provence who grow flowers for sale to the factories. The local flowers come from about 20,000 small growers who sell to just a few large users. The market can be very unstable and prices uncertain. The manual labor involved gets more expensive year by year, and much potential labor is drawn off by the flourishing tourist industry of the French and Italian Rivieras. The higher quality of the essences produced from local flowers is not so good a selling point as the lower price of those produced in other countries. These factors will very likely cause a limitation of floriculture to the better land where high yields will make it worthwhile, and use of the other land for fruit and vegetable crops.

What of competition between natural and synthetic essences and extracts? Will synthetics push natural flower and plant oils out of the perfume industry as artificial dyes have replaced vegetable colorings? Actually, extractors and perfumers agree that natural and synthetic substances both have a place in the scent business—that they complement each other. Try as he will, the chemist has been unable to reproduce a fine jasmine absolute in the test tube, while synthetic lily-of-the-valley essence is superior to the natural and is used almost exclusively. The processors at Grasse are working on both the real and artificial, aiming to give the perfumer the best materials to work with. And because he is an artist in the true sense of the word, the perfumer demands the best.

—M.A.R.

Photo credits, p. 17. Center left, Photo Tourisme, Lucien Viguier; right, Photo Tourisme, Yves Guillemaut; lower left, Photo Almasy; right, Syndicat National de la Parfumerie Française. All courtesy of *France Acutelle*.

Indonesian Farmers Harvest Less Pepper This Year

Early advent of the dry season and problems with disease have caused a sharp drop in Indonesia's pepper production this year. From early August until October, prices nearly doubled; however, they have softened somewhat in the last few weeks. If rains are normal, next year's crop should recover to usual levels.

Indonesia's pepper production has fluctuated considerably in the last 30 years. According to the country's Five-Year Development Plan, "In 1938 pepper production in Indonesia amounted to 55,000 tons, which was 80 percent of total world consumption. During the year after World War II and the revolution, pepper production declined drastically. This was caused mainly by the destruction of pepper estates during the Japanese occupation. In the 1960's production again increased." Declines after 1963 have been caused by rotten stem and yellow stem diseases. Steps will be taken to fight these diseases, beginning in Bangka, in order to raise production by about 10 percent a year. Intensive research also will be carried out to produce resistant varieties by building expermental stations in trial areas.

Production practices

Pepper grows on a vine which climbs, like ivy, on any available support. In Bangka concrete posts are used, but in Lampung the usual support is the kapok tree, which is tall and slender and provides a light shade for the coffee that often is interspersed with the pepper. Vines take about 5 years to come into production and have a useful life of about 20 years. The key to successful pepper production is a rainless 2- to 3-month period during the principal harvest season beginning at the end of July. In picking the pepper berries, pickers start with the bottom of the vines, where the berries ripen first. After the harvest, the berries are spread in the sun to dry, a process which takes about 3 days if the sun is bright. When dry, they are removed from the stem and marketed.

A good plant during a good crop year will yield 5-7 kilograms (11-15 pounds) of wet berries, although the average yield is 2-4 kilograms (4.5-10 pounds).

Marketing

If the crop is good and prices are around normal levels, the farmer markets his pepper in town. However, if prices are high as a result of a short crop, middlemen (collectors) come to the farmer. The farmers receive some financing through the collectors, who are in turn financed by the buyers or directly by exporters. Exporters process the pepper received from the traders by drying and cleaning it. Two qualities are produced: FAQ (Fair Average Quality) and ASTA (American Spice Trade Association).

Export figures for this year are currently available only through June. These figures show shipments of 4,243 tons of black pepper and 2,108 of white pepper. Fifty-one percent of the black pepper went to Singapore and 42 percent to the United States. Much of the pepper that goes to Singapore is re-exported. Since there is an important pepper trade between Indonesia and Singapore, Singapore merchants are always in Lampung following the progress of the crop. This year, with early signs that the crop would be a bad one, Singapore merchants had most of Lampung's crop cornered long before the first berry was picked. Competition for the remainder—to meet contracts—drove prices up sharply.

—Based on dispatch from JEROME M. KUHL
U.S. Agricultural Attaché, Djakarta

CCC Cattle Shipment to Thailand

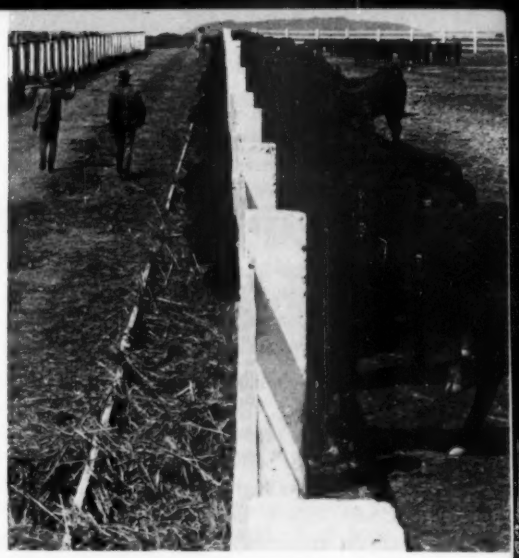
Clicking cameras, an excited rancher, and many interested spectators greeted the arrival of 408 head of U.S. purebred beef cattle at Thailand's deep-water port of Sattahip on November 14.

Watching the unloading of the largest shipment of U.S. cattle to Thailand—and the first shipment financed under the Commodity Credit Corporation (CCC) Export Credit Sales Program—were the new owner Chokchai Bulakul; curious members of the press; and Thai officials from the Ministry of Agriculture and the Department of Customs.

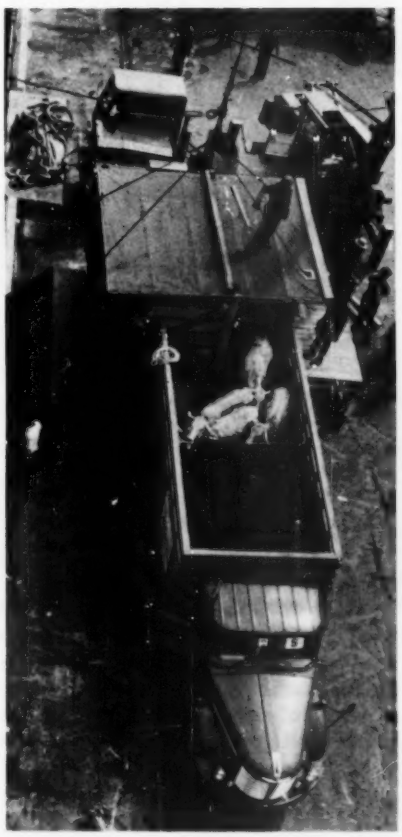
The animals which had been assembled by W. W. Callan of the Callan Ranch in Waco, Texas, spent 36 days in transit from Houston, Texas aboard the cargo ship Lipscomb Lykes. Eight attendants and nine purebred horses accompanied the cattle: 51 Santa Gertrudis bulls and 322 heifers, 5 Brahman bulls and 30 Brahman heifers—all under 12 months except one 2-year old Santa Gertrudis bull, appropriately named Chang Dang (red elephant) by Chokchai.

Chokchai is no stranger to U.S. cattle. He studied animal husbandry at Cornell University and the University of California, and intends to add the newcomers to his herd of 1,000 head.

The Thai Government is currently encouraging beef cattle production for both domestic consumption and export. The Chokchai Ranch, located in the northeastern part of the country, will be the first large-scale beef cattle operation in Thailand. Chokchai is setting up a 6-year "Beef Cattle Raising and Improvement Project" for his ranch.



Above, after their voyage the cattle settled down at the Chokchai Ranch.



Above, Mr. Chokchai, center, outlines his plans at a pre-arrival press conference; right; at port of Sattahip cattle are unloaded into trucks; below, Chang Dang (red elephant) appears a bit frisky after his trip.

Rice in India

Promising New Varieties Still Face Problems

By GUY L. HAVILAND
Assistant U.S. Agricultural Attaché
New Delhi

India's excellent results with wholesale introduction of high-yielding varieties of wheat led some people to expect that comparable results could be obtained with new rice varieties. In some ways they were right. Under certain conditions these high-yielding rice varieties have done very well. Under others they have been very discouraging. Further efforts apparently will be necessary to develop high-yielding rice varieties suitable for Indian conditions and to instruct farmers in the special cultivation techniques such varieties require. Meanwhile, India continues its attempts to obtain greater yields from traditional varieties. A substantial expansion in rice production will be needed if India is to win its race to provide sufficient food for its rapidly growing population.

Historians say that rice has been cultivated in India since the Dravidian era of several thousand years B.C. Its cultivation began in the southern part of the country and spread northward to every State and Territory. Some 300 varieties are cultivated, with selections based on plants that grow best under local conditions in the wide range that makes up the Indian climate. Rice is grown in areas of 15 to 20 inches of rainfall annually, as well as in areas receiving 15 to 20 feet. Some varieties were selected because they would grow at elevations of 6,000 or more feet, and others because they were better adapted to lowlands. Most of the domestic varieties are highly resistant to pests and produce a small crop even under poor conditions. Several natural selections from among Indian types yield very fine grain rices, such as Basmati, one of the world's standards of fine rice.

Dawn of rice research

Modern rice research in India began in 1911 with Bengal's appointment of a botanist especially for this purpose. Immediately thereafter, Madras followed suit. Nearly 20 years passed before rice research received further impetus with establishment of the Indian Council of Agricultural Research (ICAR), which urged creation of research institutes and employment of rice specialists in other States. Since 1930, 82 rice research stations have been established. Emphasis in the early years of the research programs was on long-term development of indigenous types of rice. An emergency or crash program was not visualized, as food shortages were attributed to drought and deemed inevitable.

During the period from Independence through the early 1960's, India's rice production nearly doubled. This increase resulted primarily from a rise of about 30 percent in area, including an almost doubling of the area under irrigation, rather than from any sizable increase in yields. Paddy yields in India are still among the lowest in the world.

By 1964-65 optimistic reports from India predicted that food problems were well on their way to being solved when production of rice—the country's major foodgrain—exceeded 39 million tons out of a total foodgrain production of 89 million. But during the following 2 crop years, severe drought reduced rice production to 31 million and 30 million tons, respectively, proving that adequate rainfall was still the most important factor in producing bumper rice crops in India. These droughts encouraged renewed emphasis on agricultural research, including rice research.

The best of the new high-yielding rice varieties were brought to India. Trial plots cultivated using approved methods had excellent yields from some varieties from Taiwan, IR-8 from the Philippines, and some developed by the Indian Rice Research Institute, the most important being ADT-27. Seed production was increased through double cropping, and in a short time these varieties were made available to local farmers for field trials and additional seed production.

Success and failure

The high-yielding varieties did well during dry seasons and in areas of limited rainfall. With favorable weather plus good

Below, Indian farm workers use sickles to harvest an unimproved variety of rice; right, bundles of rice are threshed by hand; below right, women pursue the back-breaking task of transplanting rice, stalk by stalk.

care and management, yields from the new rice were excellent. Some farmers harvested three and four times the quantity they had gathered in previously.

However, many farmers using the new varieties failed. Technical information on cultivating the high-yielding rice was not well disseminated. Thus, farmers prepared their paddy fields using old methods. They started their seed beds without knowing that the new varieties had to be transplanted within a certain period of time or they would fail to tiller. Many farmers used fertilizers for the first time without proper training in their application. More importantly, under high rainfall conditions, bacterial blight seemed virtually impossible to control, and control of leaf hopper required continuous attention.

Rice researchers tried crossbreeding the new varieties with local stock. Thousands of new rices were produced, and a few were selected for field trials. From these, Indian researchers came up with two new varieties, Jaya and Padma. These are now being grown on some 40,000 to 50,000 acres, but only for seed production. Both varieties have yielded well, though somewhat less than IR-8. However, they have the advantage of being finer grain rices; this makes them more acceptable in India.

The problems in growing the new varieties in India have not yet been solved. This year, the best yielding varieties—IR-8, Padma, and Jaya—were hit with bacterial blight. Some Padma fields will not return the seed planted. The combined forces of blight and bugs have left many farmers with a reluctance to try the new varieties. Loss of confidence in the extension service by farmers who experienced poor results is another problem.

What India needs is new varieties suitable to wet conditions; these are not yet available. The country needs extensive educational programs at the farmer level to disseminate technology about the new rice varieties. Farmers must be taught how to till fields, control irrigation water, and use pesticides; they must be taught when to harvest. This will mean replacement of many age-old methods. But Indian farmers have clearly shown that they are interested in profits and will change their methods if such change means higher returns.

The new varieties have not been rejected completely, nor have they met with overwhelming problems in all of India. In the northwestern Gangetic plain where irrigation is assured and where abundant sunshine—even during the monsoon season—controls bacterial blight, IR-8 has produced well. More farmers there are shifting to this variety. Continued emphasis by plant breeders on development of disease-resistant varieties with high yields offers hope for the long-term future. For the immediate future, however, modest increases in yield from local varieties through improved fertilizer use offer the most promise.

Above, new high-yielding variety gives forth an abundance of rice; below, an insecticide trial on a field of high-yielding rice in southern India.

CROPS AND MARKETS SHORTS

Weekly Report on Rotterdam Grain Prices

Current prices for imported grain at Rotterdam, the Netherlands, compared with a week earlier and a year ago, are:

Item	Dec. 9	Change from previous week	A year ago
	Dol. per bu.	*Cents per bu.*	*Dol. per bu.*
Wheat:			
Canadian No. 2 Manitoba	1.94	+1	2.02
USSR SKS-14	1.78	0	1.94
Australian Prime Hard	(1)	(1)	(1)
U.S. No. 2 Dark Northern Spring:			
14 percent	1.87	+1	1.92
15 percent	1.92	−1	1.98
U.S. No. 2 Hard Winter:			
13.5 percent	1.77	+1	1.89
Argentine	1.73	0	1.74
U.S. No. 2 Soft Red Winter	1.54	−3	1.78
Feedgrains:			
U.S. No. 3 Yellow corn	1.46	0	1.36
Argentine Plate corn	1.84	0	1.49
U.S. No. 2 sorghum	1.44	+4	1.35
Argentine-Granifero	(1)	(1)	1.37
Soybeans:			
U.S. No. 2 Yellow	2.75	+2	3.01

[1] Not quoted.
Note: All quoted c.i.f. Rotterdam for 30- to 60-day delivery.

Meat Imports Up in October

U.S. meat imports subject to quota restrictions during October totaled 108.3 million pounds, up 6 percent from the 102.1 million in October 1968. Imports during the January-October period totaled 963.3 million pounds, up 11 percent from the same period last year.

U.S. IMPORTS SUBJECT TO MEAT IMPORT LAW
[P.L. 88-482]

Imports	October	January-October
	Million pounds	*Million pounds*
1969:		
Subject to Meat Import Law [1]	108.3	[2] 963.3
Total beef and veal [3]	122.1	1,069.2
Total red meats [4]	161.3	1,438.8
1968:		
Subject to Meat Import Law [1]	102.1	869.6
Total beef and veal [3]	112.4	960.3
Total red meats [4]	143.9	1,322.4
1967:		
Subject to Meat Import Law [1]	91.8	740.1
Total beef and veal [3]	102.3	813.2
Total red meats [4]	132.3	1,134.6

[1] Fresh, chilled and frozen beef, veal, mutton, and goat meat. [2] Rejections occur after entry is made and are included in the published census figures. Rejected meat which is not subject to P.L. 88-482 and should be subtracted from these figures amounted to 11.0 million lb. during Jan.-Sep. [3] All forms, including canned and preserved. [4] Total beef, veal, pork, lamb, mutton, and goat.

U.S. Trade in Livestock and Meat

Owing to continued strong foreign demand for pork, variety meats, and hides and skins, the value of U.S. exports of livestock, meat, and meat products in October was 40.2 percent above the year-earlier level. Exports during January-October —valued at $423.8 million—were 24 percent above the year-earlier level, while imports during this period—valued at $983.4 million—were up only 8.1 percent. If the current rate of U.S. exports continues they will set a record this year.

U.S. IMPORTS OF SELECTED LIVESTOCK PRODUCTS

Commodity	October		January-October	
	1968	1969	1968	1969
Red meats:	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*
Beef and veal:				
Fresh and frozen:				
Bone-in beef:				
Frozen	421	651	8,513	6,685
Fresh and chilled	1,907	1,188	15,725	8,517
Boneless beef	93,520	98,608	770,612	879,467
Cuts (prepared)	125	185	1,172	1,389
Veal	1,760	1,828	16,314	19,000
Canned beef:				
Corned	8,367	10,086	76,846	78,464
Other, incl. sausage	1,317	2,595	12,300	19,150
Prepared and preserved	4,981	7,007	58,856	56,541
Total beef and veal [1]	112,398	122,144	960,333	1,069,208
Pork:				
Fresh and frozen	3,922	3,231	41,997	36,977
Canned:				
Hams and shoulders	16,413	19,962	189,858	195,522
Other	2,716	2,834	33,822	24,946
Cured:				
Hams and shoulders	164	262	1,799	1,748
Other	325	329	3,435	3,138
Sausage	266	375	1,980	2,906
Total pork [1]	23,806	26,994	272,882	265,238
Mutton and goat	4,450	6,070	58,413	49,667
Lamb	1,381	3,734	14,584	36,830
Other sausage	524	897	6,102	7,145
Other meats	1,313	1,510	10,086	10,692
Total red meats [1]	143,873	161,349	1,322,405	1,438,783
Variety meats	477	744	3,151	3,799
Meat extract	60	90	580	763
Wool (clean basis):				
Dutiable	8,476	3,321	111,962	76,168
Duty-free	9,204	4,161	102,961	79,131
Total wool [1]	17,677	7,483	214,918	155,297
Animal hair	761	187	6,608	4,852
	1,000 pieces	*1,000 pieces*	*1,000 pieces*	*1,000 pieces*
Hides and skins:				
Cattle	50	18	408	246
Calf	81	18	406	302
Kip	29	42	230	285
Buffalo	21	18	434	386
Sheep and lamb	1,476	548	29,250	19,747
Goat and kid	330	321	4,561	4,307
Horse	10	19	216	165
Pig	100	60	656	586
Livestock:	*Number*	*Number*	*Number*	*Number*
Cattle [2]	67,404	66,483	692,368	615,977
Sheep	18,058	10,415	21,111	13,839
Hogs	1,752	1,621	19,877	9,667
Horses, asses, mules, and burros	468	280	2,927	2,846

[1] May not add due to rounding. [2] Includes cattle for breeding.
U.S. Department of Commerce, Bureau of the Census.

U.S. EXPORTS OF SELECTED LIVESTOCK PRODUCTS

Commodity	October		January-October	
	1968	1969	1968	1969
	1,000 pounds	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*
Animal fats:				
Lard	14,367	30,025	143,765	206,689
Tallow and greases:				
Inedible	164,549	139,154	1,846,791	1,591,503
Edible	840	871	7,691	11,397
Meats:				
Beef and veal	2,075	2,058	22,257	21,501
Pork	13,178	19,580	53,961	127,531
Lamb and mutton	163	98	1,453	1,312
Sausages:				
Canned	74	90	1,169	1,057
Except canned	184	241	2,409	3,108
Meat specialties:				
Canned	112	129	1,294	1,143
Frozen	59	225	1,537	2,196
Other canned	914	1,109	7,264	8,352
Total red meats [1]	16,764	23,526	91,343	166,203
Variety meats	17,597	24,177	175,609	191,478
Sausage casings:				
Hog	636	815	5,183	348
Other natural	432	348	3,216	1,163
Mohair	1,903	1,094	11,161	11,298
Hides and skins:				
Cattle parts	2,989	2,012	28,748	27,578
	1,000 pieces	*1,000 pieces*	*1,000 pieces*	*1,000 pieces*
Cattle	1,236	1,420	10,500	12,223
Calf	126	108	1,638	1,100
Kip	39	24	297	370
Sheep and lamb	399	404	3,306	3,226
Horse	4	3	63	50
Goat and kid	19	42	203	308
Livestock:	*Number*	*Number*	*Number*	*Number*
Cattle and calves	3,267	3,452	30,747	31,195
Sheep, lambs, and goats	6,587	7,565	108,113	103,751
Hogs	2,249	1,287	11,079	14,242
Horses, asses, mules, and burros	1,884	1,493	12,088	9,730

[1] May not add due to rounding. Bureau of the Census.

Imports

Compared with last year's level, total *red meat* imports in October were up 12.1 percent, bringing the January-October total up from 1,322.4 million pounds to 1,438.8 million. Boneless beef and veal, canned beef, and lamb accounted for the increase, while imports of bone-in beef, pork, mutton, and goat were down. Imports of boneless beef and canned beef have increased because of reduced domestic production of manufacturing-type meats and higher prices. The further increase in lamb imports was due to the larger shipments from New Zealand (up 9.6 million lb to 20.1 million) and Australia (up 12.5 million lb. to 16.6 million) in response to the continued downward trend in domestic production since 1961, and the higher lamb prices that have resulted.

Total *wool* imports were down 27.7 percent during January-October because of decreased domestic milling and reductions in domestic stocks.

All categories of U.S. *hide and skin* imports except kip declined during January-October from the year-earlier level. Also, all classes of live animal imports declined. Decreased imports from Canada accounted for the decline in cattle imports, although imports from Mexico were slightly above the year-earlier level. Canada, the sole supplier of hogs to the United States, decreased its shipments because of lower production and higher Canadian pork prices.

Exports

U.S. exports of livestock and meat products during January-October 1969 were valued at $423.8 million, slightly above January-December 1968 exports. If the current trend in exports is maintained for the rest of 1969, exports will reach a record high of approximately $525.0 million, 7.3 percent above the previous high of $489.5 million in 1964. Exports have grown at a faster rate during the past few months. Compared to year-earlier levels, the value of exports was up 6.9 percent in August, 12.1 percent in September, and 40.2 percent in October.

Total *red meat* exports during January-October were 166.2 million pounds—74.9 million pounds above the year-earlier level. Greater shipments of pork, mainly to Japan and Canada, accounted for virtually all of the increase; pork exports were up 73.6 million pounds to 127.5 million. The value of these exports totaled $53.2 million during January-October, sharply up from the year-earlier level of $19.8 million.

Of the animal fats, *lard* exports during January-October, primarily to the United Kingdom, were up 43.8 percent from last year's level, to 206.7 million pounds; but *inedible tallow* exports declined 13.8 percent to 1,591.5 million pounds. Decreased shipments to the two major markets for U.S. *tallow*—Japan and the EC—accounted for most of the decline. Nevertheless, because of higher unit prices, the value of U.S. exports of tallow and greases was up 2.0 percent to $113.4 million.

The value of exports of *hides and skins* was up 25.9 percent from the year-earlier level during January-October and totaled $126.0 million. As a result of this increase, hides and skins have replaced tallow and greases as the leading U.S. export of livestock and meat products. U.S. exports of *cattle hides* were up 16.4 percent to 12.2 million pieces, the other categories were mixed. Greater shipments of cattle hides to the USSR and Eastern Europe accounted for most of the increase in hide and skin exports.

Exports of *cattle and calves* during January-October were slightly above the year-earlier level, but *hog* exports, primarily to Mexico, increased 28.5 percent to 14,242 head. Declines were recorded for the other classes of live animal exports.

Zambia Burley Tobacco Prospects

Production of burley tobacco in Zambia has been declining in the past 3 years after having reached a high of 4.4 million pounds in 1965. During 1968 only 625,000 pounds were marketed, but the average price—23.7 U. S. cents—was significantly above that of previous years.

According to latest reports, Zambia's Tobacco Institute has signed a contract with a well-known international tobacco buying organization for sale of the entire burley crop for the next 3 years. Price of the crop will average about 37 cents a pound. The 1969 crop is estimated to be about 10 percent larger than the 1968 crop.

German Cut Orchid Tender

West Germany has announced a tender allowing imports of fresh cut orchids from all countries outside the European Community, except the Communist countries of Eastern Europe.

Applications of import licenses will be accepted by the West German Government until June 25, 1970, or until an undisclosed value limit is reached. Licenses issued will be

U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C. 20250

OFFICIAL BUSINESS

United States Department of Agriculture
POSTAGE & FEES PAID

To change your address or stop mailing, tear off this sheet and send to Foreign Agricultural Service, U.S. Dept. of Agriculture, Rm. 5918, Washington, D.C. 20250.

valid through June 30, 1970. The first day of customs clearance is January 1. Country of origin and country of purchase must be the same. Also, EC quality standards and West German phytosanitary requirements must be observed.

German Cut Flower Tenders

West Germany recently announced a tender allowing imports of fresh cut flowers other than tulips, hyacinths, narcissuses, orchids, and anthuria.

Applications for import licenses will be accepted by the West German Government until May 10, 1970, or until an undisclosed value limit is reached. Licenses issued will be valid until May 20, 1970. The first day of customs clearance is January 1. Country of origin and country of purchase must be the same. EC quality standards and West German phytosanitary requirements must be observed.

Norway May Need Potato Imports

Norway may need to import 30,000 metric tons of potatoes this season, according to a recent report. Potato acreage fell from about 119,000 acres in 1967 to about 94,000 in 1968 and to about 89,000 in 1969. Because of reduced potato crops all over Europe this season, Norway is expected to turn to the United States or Canada for imports.

Crops and Markets Index

Fruits, Nuts, and Vegetables
23 German Cut Orchid Tender
24 German Cut Flower Tenders
24 Norway May Need Potato Imports

Grains, Feeds, Pulses, and Seeds
22 Weekly Report on Rotterdam Grain Prices

Livestock and Meat Products
22 Meat Imports Up in October
22 U.S. Trade in Livestock and Meat

Tobacco
23 Zambia Burley Tobacco Prospects

British Tariff Redesigned

Exporters to the United Kingdom and users of U.K. import and export statistics will be interested to know that on January 1, 1970, the United Kingdom will put into effect a redesigned Customs Tariff. The new system will involve a new number code for each category of products for which customs documentation is required, and will make it easier for traders to identify their products in terms of the British tariff.

Currently traders must identify goods in two different ways —one for duty purposes and the other to satisfy statistical requirements. The new tariff will combine the commodity descriptions now included in the three currently used volumes —the "Tariff," the "Statistical Classification for Imported and for Re-exported Goods," and the "Export List." From the inception of the new system re-exports will no longer be noted separately from U.K. exports.

The new list will have an eight-digit number for each item to identify both imports and exports of that item. The numbers, of which there will be about 6,000, will be called Tariff/Trade Code Numbers.

The U.K. Board of Trade notes that the main object of the change in the format of the "Tariff" is to facilitate the adoption of computerized procedures at ports and airports. The new system will also be much easier to use because all codes will be in one book instead of three as before. The new format, which is similar to the old "Tariff," will also be based on the Brussels Tariff Nomenclature (BTN), an international system of tariff classification used by most of the world's major trading countries—with the notable exceptions of the United States and Canada.

An advantage of the new system to users of the trade statistics is the fact that it will be possible to compare the import and export trade of individual commodities to a far greater extent than is possible under the current arrangement.

—DONALD M. NELSON, JR.
Operations Analysis Division, FAS

☆U. S. GOVERNMENT PRINTING OFFICE : 1969 394-277/24